

Midpeninsula Regional **Open Space District** 

R-16-62 Meeting 16-11 May 25, 2016

# **AGENDA ITEM**

# **SPECIAL MEETING AGENDA ITEM 1**

Approval of the Bid Plan Set for the Mount Umunhum Road Improvement Project and Authorization to Release the Request for Bids

# GENERAL MANAGER'S RECOMMENDATIONS



- 1. Approve the Mount Umunhum Road Improvement Project Design and Bid Plan Set.
- 2. Delegate to the General Manager the authority to approve any necessary changes to the Project Design and Plans, and Direct that the "As Built" Designs Come Back to the Board for Final Approval.
- 3. Authorize the General Manager to advertise the Request for Bids for the Mount Umunhum Road Improvement Project.

# **SUMMARY**

The Midpeninsula Regional Open Space District (District) entered into a contract with the civil engineering firm Pavement Engineering Inc., (PEI) on July 8, 2015 (R-15-103) to develop construction plans detailing the recommended upgrades to Mount Umunhum Road. PEI has developed a bid plan set of construction documents that have been peer-reviewed by a second civil engineering firm, Sandis, and deemed ready to include in a Request for Bids (RFB) to implement the Mount Umunhum Road Improvement Project. Sufficient funds remain in the Fiscal Year (FY)2015-16 budget to complete the bidding process and award a repair contract by end of June. Funds for construction have been requested in the proposed FY2016-17 budget, with a targeted start of early July. In order for the District to construct road improvements during the 2016/2017 construction season, condemnation proceedings for Mount Umunhum Road rights have been initiated with the Santa Clara County Superior Court to obtain possession of the necessary rights. Issuance of the RFB is not dependent on securing the property rights; however, construction of the roadway improvements requires the District's possession of the road rights before proceeding.

# **MEASURE AA**

The project is part of Measure AA (MAA) Portfolio #23, Mount Umunhum Public Access and Interpretation Projects: Open Mt. Umunhum for multi-use public access to the summit via the road and a trail; open Bay Area Ridge Trail and nearby trail connections; and preserve additional open space and complete wildlife corridor, in the amount of \$27.972 million of which \$3.965 million has been allocated for the Mount Umunhum Road Improvement Project. In addition, the project is included in the Board-approved Measure AA 5-year Project List.

# BACKGROUND

Mount Umunhum Road was built by the federal government to provide vehicular access to the former Almaden Air Force Station (AFS), which was constructed in the late 1950s and dedicated for operation in 1958. The AFS was in use for 22 years, closing in 1980. At its peak, the AFS housed approximately 120 people, including employees and their families. On average, the facility employed approximately 30 stationed military personnel, and 50 to 100 civilian personnel. Historical records indicate that in 1971 the roadway had a daily two-way traffic volume of roughly 190 vehicles. The current road is 29,800 linear feet (LF) (approximately 5.6 miles) from the summit of Mount Umunhum to the Hicks Road intersection, and ranges in width from approximately 15.7 to 28 feet wide, with an average roadway width of 21.7 feet. Historically, the two-lane rural road was used to access the former AFS. In order to provide general public access to the Summit, property rights need to be perfected for the roadway and the necessary improvements completed along the road, which include resurfacing and installing turnouts, curbs, guardrails, and other safety infrastructure. Engineered slope stabilization measures are also needed to address a number of geologic issues associated with the roadway, including slip-outs and slope failures above and below the roadway that are potential sources of sediment. In general, the substructure of the roadway is in very good condition, and a majority of the required improvements focus on the upper portion of the roadway structure that is in disrepair due to general use and lack of maintenance. After roadway improvements are completed, Mount Umunhum Road will remain a two-lane, rural road for visitors to access the Summit during open Preserve hours and at the same time benefiting the neighbors who use the road to access their properties.

# DISCUSSION

In October, 2012, the Board approved the Mount Umunhum Environmental Restoration and Public Access Project (R-12-104), which includes the Bald Mountain Parking Area, the Mount Umunhum Trail, ecological restoration and development of visitor amenities at the summit, and roadway upgrades and safety improvements to Mount Umunhum Road to accommodate public vehicular use to allow all visitors regardless of physical ability to reach the summit. Access to the summit of Mount Umunhum was identified as a priority action during the District's Vision Plan process, and funding for roadway improvements was included in Measure AA, under Priority Action (Portfolio) #23, which passed in June, 2014.

In July, 2015, the District selected PEI to design and develop the construction plans for the proposed roadway improvements. PEI has developed the requested bid plan set, which is now ready for issuance as part of a public bid process to implement the recommended upgrades to Mount Umunhum Road and provide safe public vehicular access to the summit.

In May, 2016, PEI's road design was peer-reviewed by Sandis. In general, Sandis concurred with PEI's design but recommended additional information and details to the plans and specifications. Sandis also recommended installation of new guardrail to the road in addition to replacing existing guardrail. PEI will update project plans and specifications by May 31, 2016 to address the comments provided by Sandis.

The road construction project is being closely coordinated with the Summit Project that is focused on public access improvements and site restoration on the mountaintop. The two design teams and Project Managers have worked closely together in an effort to ensure integration and

coordination of these designs, contract documents, construction timelines, and administration to ensure successful delivery of the Mount Umunhum Road Improvement Project and the Summit Project.

The Mount Umunhum Road Improvement Project's bid plan set includes the following proposed improvements and upgrades to Mount Umunhum Road and associated infrastructure:

# **Proposed Road Surface Improvements**

- Resurface the entirety of Mount Umunhum Road from the intersection of Hicks Road to the flagpole area near the Summit using either a Cold In-place Recycling (CIR) or Pulverize & Replace Process (P&R) (remainder of roadway to the summit area of the mountain will be repaired as part of the Summit Project);
  - The Request for Bids will solicit for both resurfacing techniques, as they have a similar cost, performance, and life expectancy (20 years).
  - Both techniques recycle and utilize 100% of existing roadway material during the resurfacing process.
  - Each process requires different types of machinery; also typically, General Contractors can perform the P&R process, whereas special licensing is required for the CIR process.
- Addition of a double chip seal to entire roadway surface;
  - Chip seal increases the life of the road by 10 to 15 years and provides for increased traction.
- Shallow and deep road settlement repairs;
- New Gabion retaining walls below roadway; and,
- 20-foot paved driveway aprons for the four (4) private properties whose residents use the road to access their properties.

Proposed Surface Improvements	Quantity
Resurface Entire Roadway, 18' Wide	532,260 square feet (SF)
Shallow & Deep Road Settlement Repairs	30,888 SF
Gabion Retaining Walls	89 linear feet (LF)

# **Proposed Road Safety Improvements**

Mount Umunhum Road is designated as a multi-modal roadway allowing for vehicular and bicycle traffic. The sharing of the narrow and steep roadway by the two transportation methods required additional attention during the Project design and development process, resulting in roadway safety design elements that address both the safety needs of vehicular drivers and bicyclists. Additionally, the Project EIR and Mitigation Monitoring Report were developed with the understanding of an expected increase in vehicular and bicycle traffic on the roadway, and outlined the required safety measures for incorporation into the Project plans in order to provide a means for bicyclists to share the roadway with vehicles in a safe manner. These include:

• New guardrails, replacement of existing guardrails and end terminals;

- Roadway striping, fog lines, and botts'dots;
- Signage related to traffic calming, road sharing, pedestrian crossing, speed limit, no parking, and signage required by the Project's Mitigation Monitoring Plan;
- Roadside concrete erosion control barriers;
- Erosion and rock netting;
- Removal of roadside trees, under road roots, and upslope boulders and material at risk of failure;
- Removal and replacement of a roadside asphalt dike.

Proposed Safety Improvements	Quantity
Replacement of Existing Guardrails	3,256 LF
New Guardrail End Terminals	1,450 LF
Erosion Control Barriers	2,520 LF
Erosion Control Netting	362 LF
Asphalt Dike	14,204 LF
Root Removal	2,493 SF
Tree, Stump, and Root Removal	26 each (EA)
Boulder & Material Removal	860 LF

# **Proposed Road Drainage Improvements**

- Removal and replacement/installation of drop inlets, curb inlets, asphalt scuppers;
- New roadside V-ditch and rock-lined V-ditch;
- Removal and replacement/installation of drop inlets and headwalls;
- New sub-surface and edge drains; and
- Removal and replacement of damaged culverts and drain pipes.

Proposed Drainage Improvements	Quantity
Drop Inlets	62 EA
Curb Inlets	4 EA
Asphalt Scuppers	402 LF
V-Ditch	21,981 LF
Head Walls	32 EA
Sub and Edge Drains	110 LF
New Drainage Pipe	343 LF

# **Additional Roadway Improvements**

- Installation of a new roadway gate on Mount Umunhum Road between the Hicks Road intersection and Jacques Ridge parking lot; and
  - The gate will be a solar powered electric automatic double leaf gate, similar to the existing gate at the entrance to the Bald Mountain Parking Area.
  - Additionally, two fully shielded, downturned solar powered motion-triggered security lights will be installed at the gate location to improve nighttime access for District staff and neighboring property owners, as well as provide an added level of security. The lights will be mounted on a new light pole, with one light pointed down towards Hicks Road, and the other positioned down towards the Jacques Ridge parking area and up Mount Umunhum Road.

- Five traffic pullouts along Mount Umunhum Road.
  - Each pullout will have a five-foot paved apron from the edge of the roadway, with the remaining pullout area consisting of compacted gravel.
  - All pullout locations will have "No Parking" signs, and are intended for temporary refuge from Mount Umunhum Roadway traffic.

Approval of the Project bid plan set and the issuance of a Request for Bids (RFB) is the first step in selecting a qualified contractor to construct the new roadway upgrades. The District is in the process of resolving multiple, long-standing real property and right-of-way issues that need to be addressed to ensure that the District can provide and protect public access to the summit of Mount Umunhum. As of January 2016, special counsel initiated condemnation proceedings in Santa Clara County Superior Court to obtain possession of the necessary rights so that the District can construct road improvements during the 2016/2017 construction season. Issuance of the RFB is not dependent on securing the property rights; however, construction of the roadway improvements requires the District's appropriate possession of the road before proceeding.

In order to promote efficiency in and professional oversight of the design and construction process, the General Manager recommends that the Board delegate to the General Manager the authority to approve any necessary changes to the project design and plans moving forward. s These changes could include modifications to the plans and specifications, and increases or decreases in the quantity of work to be performed or materials, equipment, or supplies furnished. The General Manager, through the Engineering and Construction Manager, would only approve changes if the modifications are consistent with previously stated Board direction and design approvals, and the total cost remains both within the Board-approved project budget and the contract "not-to-exceed" amount as approved by the Board (presently scheduled to come before the Board in July). Any changes that require additional funds beyond those previously authorized by the Board apprised of these changes, the General Manager would provide updates as needed under the Biweekly Reports. Moreover, the Board will be asked, at the conclusion of the project, to formally accept the improvements and approve the final As Builts.

# FISCAL IMPACT

Funds in the amount of \$3.6 million will be requested in the proposed FY2016-17 budget to complete the construction of the Mount Umunhum Road Improvement Project as described above. Project expenses are eligible for Measure AA reimbursement.

# **BOARD COMMITTEE REVIEW**

Given the high level of Board interest in the Summit Project and associated public access and roadway improvements, this item is being brought directly to the full Board.

# **PUBLIC NOTICE**

Public notice of this Agenda Item was provided as required by the Brown Act. Additional public notice was provided to interested parties and Mount Umunhum Road neighbors.

Related to this item, a neighborhood meeting was held on February 25, 2016 at the Los Gatos Adult Recreation Center where District staff presented the draft roadway designs and plans to

neighboring private property owners, residents whose driveways are connected to Mount Umunhum Road, and a representative from San Jose Water Company. The District will coordinate closely with these residents and neighbors prior to and during construction of the roadway improvements. Eight neighbors and members of the public attended the meeting, where comments focused on potential security issues on the roadway and neighboring properties once public vehicular traffic is allowed to the summit of Mount Umunhum. These comments have been incorporated into the Project where appropriate.

# **CEQA COMPLIANCE**

The Project was evaluated as part of the Environmental Impact Report (EIR) and Mitigated Monitoring Plan (MMP) approved by the Board on October 17, 2012, for the Mount Umunhum Environmental Restoration and Public Access Project in Sierra Azul Open Space Preserve (R-12-104). In 2015, the District prepared an Addendum to the 2012 EIR to analyze minor modifications to the Summit and Road improvements that included installation of gates and fencing, and acquiring a road access easement to Mount Thayer for District vehicles, contractors, and emergency access only (no general public access). The EIR Addendum analyzed these modifications to the Project to fulfill the requirements of the California Environmental Quality Act (CEQA)

# NEXT STEPS

If approved, the General Manager will direct staff to move forward with the public bidding process for construction of the Mount Umunhum Road Improvement Project as set out herein. Once the bidding process is completed, in approximately mid-July, staff will present the results to the Board for consideration of award of contract for construction of the road improvements. Award of the contract for construction and the construction itself will be subject to the District's successful resolution of its concurrent judicial proceedings to obtain possession of the necessary road rights.

Attachments

- 1. Proposed Mount Umunhum Road Improvement Bid Plan Set
- 2. Sandis Preliminary Peer-Review of Proposed Mount Umunhum Road Bid Plan Set

Responsible Department Head:

Jane Mark, AICP, Planning Manager, Planning Department Jason Lin, Engineering and Construction Manager, Engineering & Construction Department

Prepared by: Zachary Alexander, Capital Project Manager II, Engineering and Construction Department



# **MT. UMUNHUM ROAD DESIGN PROJECT MIDPENINSULA REGIONAL OPEN SPACE DISTRICT**



# LEGEND

	MISCELL
	REMOVE
	SHALLO\
	DEEP RC
	REMOVE
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	REMOVE
	PLACE B
•••••	REMOVE
	INSTALL
	REMOVE
() <del></del>	TANGEN
₩ <u></u>	FLARED
	INSTALL
•••••	INSTALL
•••••	INSTALL
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	INSTALL
->>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	INSTALL
<b></b>	REMOVE
	INSTALL
	INSTALL

	SHEET INDEX					
SHEET NO.	SHEET DESCRIPTION					
T.1	TITLE SHEET					
T.2	ITEM OF WORK TABLES					
Т.3	ITEM OF WORK TABLES					
D.1	DETAILS					
D.2	DETAILS					
D.3	DETAILS					
D.4	DETAILS					
D.5	DETAILS					
C.1	STA. 30+00 TO 37+59, 300+00 TO 306+80, 400+00 TO 401+97					
C.2	STA. 37+59 TO 55+22					
C.3	STA. 55+22 TO 69+26					
C.4	STA. 69+26 TO 84+93					
C.5	STA. 84+93 TO 95+33					
C.6	STA. 95+33 TO 106+29					
C.7	STA. 106+29 TO 124+53					
C.8	STA. 124+53 TO 146+76					
C.9	STA. 146+76 TO 161+62					
C.10	STA. 161+62 TO 176+31					
C.11	STA. 176+31 TO 198+42					
C.12	STA. 198+42 TO 216+41					
C.13	STA. 216+41 TO 229+21					
C.14	STA. 229+21 TO 247+31					
C.15	STA. 247+31 TO 264+70					
C.16	STA. 264+70 TO 283+53					
C.17	STA. 283+53 TO 298+25					

ANEOUS PAVING		INSTALL EDGE DRAIN
EXCESS ASPHALT	=====	EX. CULVERT PIPE
W ROAD SETTLEMENT REPAIRS		EX. CULVERT CHANNEL
DAD SETTLEMENT REPAIRS		EX. FLOW LINE/TOE OF SLOPE
TREE ROOTS	_ · · · · ·	EX. TOP OF SLOPE
BOULDERS ON UPSLOPE		EX. PAVED DITCH
ASE ROCK		PROPERTY LINE BOUNDARY
& REPLACE/INSTALL HMA DIKE	EASEMENT	EASEMENT LINE
MOUNTABLE HMA DIKE	DS# □	DRAINAGE STRUCTURE
& REPLACE/INSTALL GUARDRAIL	C0 ()	CLEANOUT
T GUARDRAIL END TERMINAL	د <i>ر</i> بر مربر	REMOVE TREE
GUARDRAIL END TERMINAL	۲	REMOVE TREE STUMP
PRE-CAST CONCRETE BARRIER	P	ROADSIDE MARKER/PADDLE
ROCK FENCE	•	ROADSIDE SIGNAGE
PIPE	SCUP	HMA SCUPPER (N)
ROCK-LINED DITCH	<b>●</b> <sup>#</sup>	CORING LOCATION
V-DITCH	AC	ASPHALT CONCRETE (E)
& REPLACE/INSTALL PAVED DITCH	HMA	HOT MIX ASPHALT (N)
PCC CURB	PCC	PORTLAND CEMENT CONCRETE
PCC SWALE	# #	DETAIL NUMBER SHEET NUMBE

	4/7/16 85% Plan Check Submittal JR	ement Engineering Inc.	You can ride on our reputation	Corporate Office:	Satistic Objects Called A	Bair Luis Doispu, CA 30401-0010 805-781-2265		REV DATE DESCRIPTION AF
		Fav	MT. UMUNHUM ROAD REHABILITATION PROJECT					
	СС	N SNC	OT STR	F	DF C1	R FIC	ЛС	1
R	DRAWN PROJEC SCALE: DATE: SHEET	BY: CT NU	JF JMBER 150 AS SH MAY BER:	RE 175 10V 20 <sup>7</sup>	5 VN 16			

	GRADI	NG & EX		N		V-I	ОПСН		SF	IOULDER	BACKIN	3
ginning	Ending	Side of	Cros	s- Stockpile Area Volume	Beginning	g Ending Station	Side of Road	Lenath	Beginning	Ending Station	Side of Road	l enr
Station	Station	Road	(sq y	d) (cu yd)	36+00	36+27	L	27'		30+50		50
31+78	32+50	L	0.05	2 1.24	36+33	38+39	L	206'	30+00	31+24	R	124
∠+50   3+61	34+88 35+35	L	0.20	/ 16.41 6 9.02	38+45 40+24	40+18 43+97	L L	173' 373'	32+00	36+10 36+00	R   I	
6+00	37+50	L	0.15	6 7.78	44+03	46+18	L	215'	39+25	40+84	R	15
7+50 3+15	38+45 42±25	L	0.23	3 7.39	46+24	51+18	L	494'	41+77	42+25	R	48
2+25	42+25 44+14	L	0.51	<u>∠ 04.83</u> 3 14.70	51+24 54+73	54+67	L L	<u>343</u> 17'	44+/9 50+78	<u>40+17</u> 51+17	<u> </u>	138 39
4+14	44+40	L	1.71	4 14.86	61+70	63+70	L	200'	52+98	55+44	R	246
4+40	50+35		0.23	3 46.28	63+76	64+80	L	104'	56+20	59+05	R	285
1+21	51+21 51+40		0.23	<u> </u>	68+75	68+85		10 <sup>-</sup> 59'	63+90	<u>63+22</u> 64+80		90
1+40	53+40	L	1.68	8 112.52	70+67	70+97	L	30'	68+13	69+52	R	139
3+40 4+90	54+90 61+70		0.23	3 11.67 6 257.30	71+03	75+76	L	473'	69+50	70+67		117
1+70	62+80	 L	0.23	3 8.56	81+70	85+58	L	388'	72+12	75+70		250
2+80	63+73	L	1.68	8 52.32	85+64	89+58	L	394'	78+59	80+18	R	159
3+73	64+80 67+80		0.23	3 8.32 6 113.56	89+64	90+00	L	36'	Driveway (	<u>@ 79+00</u>		13
8+75	69+50		0.23	3 5.83	91+00	92+32	L	132		$\frac{82+16}{2}$		13
9+50	70+65	L	-	158.15	94+20	94+73	L	53'	81+64	83+90	R	22
0+65	71+00		1.68	8 19.69	94+79	98+67	L	388'	84+32	85+12	L	80
2+00	72+00	L	1.68	<u> </u>	103+00	106+70		370 <sup>-</sup> 94'	- 86+05	<u>88+92</u> 89+80		28
3+00	73+80	L	0.23	3 6.22	107+76	111+45	L	369'	91+70	92+50		80
3+80	74+80	L	1.68	8 56.26	111+51	116+09	L	458'	93+15	96+50	R	33
4+80 3+00	76+00 77+10		0.23	3 9.33 8 61.89	116+15	118+54	L	239'	97+45	97+50		5
7+10	78+77		0.23	3 12.99	125+60	125+55	L	445'	98+00	$\frac{y \sim 97 + 75}{99 + 47}$		14
1+70	82+10	L	0.77	8 10.37	130+12	132+00	L	188'	107+75	107+85	R	10
2+10	83+50	L	0.91	8 42.83	137+98	139+60	R	162'	110+15	111+38		12
5+70	85+80		0.99	<u> </u>	143+50 146+25	146+19		269'	- <u>122+23</u> 124+04	122+80	R R	
5+80	89+25		0.44	2 50.80	151+53	156+27	L	474'	130+38	132+00		16
)+25	90+00		0.23	3 5.83	157+80	158+55	L	75'	Turnout @	~140+00	R	6
,+00    +00	92+50		0.73	0 <u>24.53</u> 3 11.67	164+64	16/+17 172+00	L R	253'		149+20		- 68 
@~92	2+45	L	-	20.72	173+55	176+87		332'		156+35	R	5
2+50	94+20	L	1.15	1 65.23	182+50	182+97	L	47'	157+75	159+20	R	14
++20   1+8∩	98+70 103+0∩	L I	0.23	35.00 1 46.04	187+00 215±91	188+50 216±25	L P	150' ///	Driveway @	<u>2~159+00</u>		9
3+00	118+60	L	0.23	3 121.33	197+50	204+45	L	695'		162+97	<u>–        </u>	
8+60	123+00	L	1.15	1 168.83	217+45	217+97	R	52'	162+55	163+59	R	10
3+00	132+00		0.23	3 70.00	220+00	225+73	R	573'	164+79	166+94	R	21
3+50	149+90	 	0.23	3 49.78	228+25	230+55	R	79'	166+05	1/3+22		21
1+50	152+20	L	0.23	3 5.44	236+50	238+30	R	180'	172+43	172+90	R	4
2+20	154+30		0.43	6 30.49	242+25	243+56	R	131'	Driveway @	₂ ~173+20	R	10
4+30 7+80	156+33	 	0.23	3 6.22	243+62	244+14	R	52' 215'	Driveway @	<u>2~173+40</u>		
61+90	162+60	R	0.23	3 5.44	246+41	248+00	R	159'	180+32	191+77		69
64+60	167+20	L	0.23	3 20.22	248+98	251+43	R	245'	203+45	203+80	R	3
6+94 3+50	173+00	<u>к</u> І	0.23	3 47.13 3 26.44	251+49	254+18	R	269'	204+45	206+43	R	19
32+50	183+03	L	0.23	3 4.12	244+61	244+90	L	29'	204+45	200+04	R	
37+00	188+60	L	0.23	3 12.44	257+35	257+78	R	43'	219+90	220+76		8
97+50   99+00	199+00 201+00	L I	0.23	3   11.67 7   171 11	262+00	262+20	R	20'	Turnout @	~221+00		9
1+00	204+50	 L	0.23	3 27.22	∠03+05 265+03	268+30	L L	327'	223+66	230+55	<u> </u>	10
5+78	216+25	L	0.23	3 3.66	268+36	273+24	L	488'	234+17	234+50		3
1/+50	218+02 225±70	L 1	0.23	3 4.04	273+30	275+33	L	203'	236+33	236+60	L	2
28+25	230+55	 L	0.23	3 17.89	2/5+39	286+25	L L	220	241+23	<u>∠41+80</u> 245+39		- 5 - 10
4+11	234+72	R	0.23	3 4.74	287+45	288+40	L	95'	244+90	246+00		
4+72	234+95	R	2.73	3 20.95	289+00	291+75	L	275'	246+41	247+50	R	10
8+30	230+3U 240+25	R	1.73	<u> </u>			IOTAL=	14,849 lf	<b></b> <u>247+50</u>	250+18	L	
0+25	256+05	R	0.23	3 122.89	Γ	DOGIE			Drivewav @	254+50 254+50		3
7+40	257+84	R	0.23	3 3.42	Reginning		ED DITCH	1	254+70	255+38	L	3
∠+00   3+05	262+20 277+70	<u>к</u>	0.23	ა   1.56 3   11 <u>3</u> დ/	Station	Station	Road	Length	256+98	261+35		43
<u>@</u> ~26	<u>59+8</u> 0	L	-	14.00	137+45	5 137+92	R	47'	_∠62+15 Driveway @	<u>∠o∠+/0</u> 2~262+50		5
@~27	72+75	L	-	3.74	161+92	2  162+89		97'	Driveway @	262+75		9
∠+14   3+26	283+26 286+25	L I	1.24	U 46.29 7 16.61			LIUTAL=	144 IT	262+75	266+60	R	38
9+00	291+80	L	0.16	7 15.56			ОПСП		267+32	<u>∠08+85</u> 272+30	R   K	15
2+34	302+80	L	0.08	3 1.28	Beginning		Side of		274+73	276+00	R	
∠+80	303+84	L		$\frac{1}{1} = 2.058 \text{ or}$	Station	Station	Road	Length	Turnout @	~226+50	R	17
				, <u> </u>	211+79	211+89	R	10'	279+12	2/9+35 283+48	R R	
				1	215+63	215+75 287+39	к L	1∠ 7'	Driveway @	<u>288+75</u>		
	IR Sido			Approx	291+75	292+50	L	75'	289+40	290+35	R	9
_ocatio	on   Roa	ad Ci	rcum	Diameter	295+28	296+50	R	122'	292+50	292+82		3
31+24	4 R		2.0'	7.6"	297+33	∠98+24	L TOTAI =	91' 317 lf	296+68	296+75	<u> </u>	$+\frac{1}{7}$
38+3	5 L		1.5'	5.7"			· - · / "L"	/ 11	298+00	298+25	R	2
42+9	5 R		6.2'	23.7"					300+00	300+88		8
142+0	00 L		5.0'	19.1" E O''	Beginning		Side of		Driveway @	)~300+88 )~301+00		
148+6 150±0	אן וע ם 20		1.3	5.U <sup>**</sup>	Station	Station	Road	Length	301+32	304+12	R	28
151+0	)0 R		3.5'	13.4"	53+00	66+00		1300'	301+45	304+32		28
155+7	78 R		6.6'	25.2"	86+00	86+35 90+00		35 <sup>°</sup> 150'	306+00 400+90	<u>- 306+87</u> 401+97	<u>н к</u>	8
156+4	15 R		4.4'	16.8''	91+50	94+50		300'			TOTAL	= 14,0
156+9	90 R		3.7'	14.1"	101+20	101+40	L	20'				
157+2	20 R		3.2'	12.2"	112+85	113+15	L	30'	<b></b>			
		2.9	∍ avg.   (4		148+00	149+00	R	100'			# of	Tot
40410	85   R	bra	رح nches)	11.1"	234+50	237+00	R	250'	Approximate	# of	Junction	Leng
104+0	25 R		3.3'	12.6"			TOTAL =	2,480 lf	Location	Conduits	Boxes	Cond
164+6	10 L		2.5'	9.5"					30+00	2	1	41
164+6 167+2 177+4	70 1		1.7'	6.5"		GABION	WALL		80+13	2	<u>∠</u> 2	50
164+6 167+2 177+4 177+7	<u> </u>		7.5'	28.6"	Beginning	Ending	Side of	T. 1	151+55	1	2	25
164+6 167+2 177+4 177+7 186+0	0 E				Station	Station	Road	Length		TOTAL=	7	595
164+6 167+2 177+4 177+7 186+0 TOTAL	0 R L = 13 e	ea <18	3" Diame		501-00	50+00	Þ	70'				
167+2 177+4 177+7 186+0 FOTAL	0 R L = 13 e 2 e	ea <18 a 19"	3" Diame - 30" Dia	ameter	59+20 100+35	59+92 100+53	R R	72' 18'			<u> </u>	
164+6 167+2 177+4 177+7 186+0 TOTAL	00 R L = 13 e 2 e	ea <18 a 19"	3" Diame - 30" Dia	ameter	59+20 100+35 141+40	59+92 100+53 142+30	R R L	72' 18' 90'				

HMA DIKE

 Beginning
 Ending
 Side of

 Station
 Station
 Road
 Length

 92+01
 93+15
 R
 114'

 98+73
 100+80
 L
 207'

 100+80
 106+43
 R
 563'

 106+48
 106+71
 R
 23'

 107+85
 109+10
 R
 125'

 109+16
 111+64
 R
 248'

 111+70
 114+50
 R
 280'

 115+79
 117+98
 R
 219'

 118+04
 120+25
 R
 221'

 122+80
 124+74
 R
 194'

 124+80
 124+94
 R
 14'

 131+00
 137+45
 P
 645'

 124+80
 124+94
 R
 14'

 131+00
 137+45
 R
 645'

 136+77
 141+72
 L
 495'

 141+78
 143+50
 L
 172'

 149+75
 153+46
 R
 371'

 153+51
 154+42
 R
 91'

 156+33
 157+80
 L
 147'

 159+20
 161+90
 R
 270'

 162+97
 164+64
 L
 167'

 173+55
 175+82
 R
 227'

 175+88
 180+46
 R
 458'

 183+03
 187+00
 L
 397'

183+03 187+00 L

193+18 202+50 R 
 202+56
 203+45
 R

 206+80
 208+67
 L

 207+27
 208+00
 R
 73'

 209+85
 212+03
 L
 218'

 211+95
 215+63
 R
 368'

212+09213+75L166'215+15217+25L210'

 216+25
 217+45
 R
 120'

 218+02
 220+00
 R
 198'

 221+63
 224+72
 L
 309'

224+78 225+53 L

225+78 227+00 R 230+80 234+69 L

234+95 236+50 R

225+59 228+00

234+75 235+42

176+93 182+50 
 176+93
 182+50
 L

 189+45
 191+40
 L

397' 557' 195'

932' 89'

187'

75' 241' 122' 389' 67'

155'

L

L

 

 234+75
 235+42
 L
 67

 234+95
 236+50
 R
 155'

 236+60
 238+48
 L
 188'

 238+53
 239+68
 L
 115'

 240+25
 242+25
 R
 200'

 241+80
 244+45
 L
 265'

 244+51
 244+61
 L
 10'

 246+00
 247+39
 L
 139'

 247+46
 247+50
 L
 4'

 250+18
 252+18
 L
 200'

 252+24
 252+30
 L
 6'

 255+38
 256+92
 L
 154'

 256+05
 257+35
 R
 130'

 257+84
 262+00
 R
 416'

 268+85
 270+62
 R
 177'

 270+68
 270+88
 R
 20'

 272+30
 274+52
 R
 222'

 274+58
 274+73
 R
 15'

 277+65
 282+15
 L
 450'

 295+46
 297+94
 R
 248'

 300+00
 30 MOUNTABLE HMA DIKEBeginningEndingSide ofStationStationRoadLength47+5148+75R124'70+9671+96R100'288+40289+00L60'TOTAL=284 lf

PLACE BASE ROCK								
Approximate	Side of							
Location	Roadway	Area (sf)						
158+80	L	940						
173+40	L	390						
189+00	L	490						

STUMP REMOVAL								
	Side of							
Location	Road							
33+50	L							
303+82	L							
303+84	L							
TOTAL =	3 ea							

TOTAL= 1820 sf

Beainnina	Terminal Ending	Guar Beainnina	drail Ending	Final End Beginning	Termina	al 1 Side	of	Length o End	of Length of	Total
Station	Station	Station	Station	Station	Station	Roa	d <sup>-</sup>	Fermina	Is Guardrail	Lengt
40+64 51+17	41+09 51+42	41+09 51+42	41+52 52+00	41+52 52+00	52+25	R		50'	58'	93 108'
55+44 59+05	55+69 59+30	55+69 59+30	55+95 59+65	55+95 59+65	56+20 59+90	R		50' 50'	26'	76' 85'
66+40	66+65	66+65	67+88	67+88	68+13	R		50'	123'	173'
<u>71+59</u> 88+92	<u>7<b>1+84</b></u> 89+17	71+84 89+17	71+87 90+08	71+87 90+08	72+12 90+33	R		50' 50'	<u> </u>	53' 141'
99+47	99+72	99+72	100+55	100+55	100+8	) R		50'	83'	133'
106+71 114+50	106+96 114+75	106+96 114+75	107+50 115+54	107+50 115+54	107+7 115+7	5 R 9 R		50' 50'	54' 	50' 129'
120+25	120+50	120+50	121+98	121+98	122+2	3 R		50'	148'	198'
132+00 140+15	132+25 140+40	132+25 140+40	136+65 142+15	136+65 142+15	136+9			<u>50'</u> 50'	440'	490' 225'
156+35	156+60	156+60	157+50	157+50	157+7	5 R		50'	90'	140'
159+26	159+51	159+51 163+84	161+60 164+54	161+60 164+54	161+8	5 L		50' 50'	209'	259' 120'
182+92	183+17	183+17	184+61	184+61	184+8	5 R		50'	144'	194'
191+77	192+02	192+02	193+75	193+75	194+0	) R		50'	173'	223'
205+60	204+03	Existing (	Suardrail	204+20	204+4	3 L		50'	-	50'
213+00	213+25	213+25	214+90	214+90	215+1	5 L		50'	165'	215'
217+25	217+50	217+50	230+55	230+55	230+8			50 50'	390'	440'
235+42	235+67	235+67	236+08	236+08	236+3	3 L		50'	41'	91'
239+68	239+93	239+93	240+98	240+98	262+1	5 L		50'	30'	80'
266+60	266+85	266+85	267+07	267+07	267+3	2 R		50'	22'	72'
<u>277+45</u> 292+82	<u>2/7+70</u> 293+07	277+70 293+07	278+87 296+15	278+87 296+15	279+12	2 R D L		50' 50'	308'	167' 358'
HM	A SCUPF	PER	-			PRE	-CAS	ST CON Ending	NCRETE BA	RRIER
Location 36+13	R R	Length	-			54+0	1 IIC	ত।ation 59+22		Length 432'
36+95	R	15'				59+2	28	61+70	L	242'
46+20	R	17'	_			64+8	80	65+09	L	29'
49+20	R	<u>6</u> ' 9'				66+9	99	67+80	L	81'
69+70	R	11'				92+5	50	94+20	L	170'
76+00	R	12'	_			96+5	50 80	97+45 102+32	R 2 I	<u>95'</u> 152'
84+80	R	12'	_			102+3	38	103+00	 ) L	62'
85+85	R	5'	_			118+	60	121+03	3 L	243'
91+99 106+45	R	24'	_			191+	40	193+12	2 L	172'
109+12	R	10'				193+	18	196+30	) L	312'
111+67	R	20'	_			227+	36   00	197+50 228+25	) L 5 R	<u> </u>
118+00	R	14'				230+	55	232+35	5 R	180'
141+75	L	5'				238+	30	238+75	5 R	45'
153+50	R	5'				238+	14	283+26	5 K	144
175+85	R	9'	_			<u> </u>			TOTAL=	3,079
180+49	R	8'								
194+32	R	17'		Deni		PAV	ED		UTS	
212+06	L	9'	_	Sta	tion	naing Station	Roa	adway	New EP	Area (s
224+75	L	15'	_	80-	+18	81+64		R	15'	1440
225+56		20'	_	139	+60 1	40+15		R	8' 8'	440
238+50	L	13'		220	+76 2	277+45		R	8' 8'	575 1170
244+48		9'						1	FOTAL=	3,625
252+21	L	9'								
256+95	L	11'	_					ROC	K FENCE	
270+65	R	15'	_			Begi	inning	g Endir	ng Side of	
214:00		8'				Sta 53	ation +00	Static	n Road	Lengti
297+96	R					00		67+9	60 L	610'
297+96	TOTAL =	= 435 ea				61	+70	0/+0		
297+96	K TOTAL =	= 435 ea	J			61 227	+70 7+00	228+2	26 R TOTAI =	126' 901 #
297+96	TOTAL =	= 435 ea		G		61 227	+70 7+00	228+2	26 R TOTAL=	126' 901 li
Beginning	MISCE	= 435 ea	J IS PAVIN of Avg	IG g. Appr	ox.	61 227	+70 7+00	228+2	26 R TOTAL=	126' 901 li
Beginning Station	MISCE	= 435 ea	J IS PAVIN of Avg Wid	lG g. Appr th Area	ox. (sf)	61 227	+70 7+00	228+2	26 R TOTAL= PLACE ROO	126' 901 II
Beginning Station 30+50	MISCE Ending Statior 32+52	= 435 ea	J IS PAVIN of Avg Wid 2.3	IG g. Appr th Area 3' 46	ox. (sf)	61 227	+70 7+00	228+2	26 R TOTAL= PLACE ROO EROSI	126' 901 li CK FOF ON
Beginning Station 30+50 33+56 206+43	MISCE MISCE Ending Statior 32+52 35+40 206+5	= 435 ea	J IS PAVIN of Ave Wid 2.3 2.4 3.8	IG g. Appr hth Area 3' 46  ' 38 3' 30	ox. (sf) 0 0	61 227	<u>+70</u> 7+00	228+2	26 R TOTAL= PLACE ROO EROSI PROTEC	126 901 li 901 li CK FOF ON TION Side of
Beginning Station 30+50 33+56 206+43 206+97	MISCE Ending Statior 32+52 35+40 206+5 207+2	= 435 ea	J IS PAVIN of Avg 1 Wid 2.3 2.7 3.8 1.8	IG g. Appr th Area 3' 46 1' 38 3' 30 3' 55	ox. (sf) 0 0	61 227	<u>+70</u> 7+00	228+2	PLACE ROO EROSI PROTEC	126' 901 II ON TION Side of Road
Beginning Station 30+50 33+56 206+43 206+97 208+00 208±67	K           TOTAL =           MISCE           Ending           Station           32+52           35+40           206+5           207+2           211+89           200+0	=         435 ea           LLANEOU         Side c           n         Road           2         L           0         L           1         R           7         R           9         R           5         -	IS PAVIN           of         Avg           I         Wid           2.3           2.4           3.8           1.8           3.6           2.7	IG g. Appr th Area 3' 460 1' 380 3' 300 3' 555 5' 1400 1' 255	ox. (sf) 0 0 5 00	61 227	+70 7+00	228+2	PLACE ROO EROSI PROTEC	126' 901 II CK FOF ON TION Side of Road L
Beginning Station 30+50 33+56 206+43 206+97 208+00 208+67 232+35	K           TOTAL =           MISCE           Ending           Station           32+52           35+40           206+5           207+2           211+89           209+81           234+1	=         435 ea           LLANEOU         Side c           n         Road           2         L           0         L           1         R           7         R           9         R           5         L           1         R	IS PAVIN           of         Avg           1         Wid           2.3         2.5           3.6         3.6           3.6         3.7	IG g. Appr th Area 3' 46 1' 38 3' 30 3' 55 5' 140 5' 140 7' 35 7' 135	ox. (sf) 0 0 0 0 0 0 0 0 0	61 227	<u>+70</u> 7+00	228+2	26 R TOTAL= PLACE ROO EROSI PROTEC -ocation 79+25 159+15 167+10	126' 901 II CK FOF ON TION Side of Road L L
Beginning Station 30+50 33+56 206+43 206+97 208+00 208+67 232+35 292+80	K           TOTAL =           MISCE           Ending           Station           32+52           35+40           206+5           207+2           211+8           209+8           234+1           295+2	=         435 ea           LLANEOU         Side c           n         Road           2         L           0         L           1         R           7         R           9         R           5         L           1         R           8         R	J S PAVIN of Avg 2.3 2.7 3.8 1.8 3.6 3.0 7.7 2.4	IG g. Appr th Area 3' 46 1' 38 3' 30 3' 55 5' 140 0' 35 7' 135 1' 600	ox. (sf) 0 0 0 0 0 0 0 0 0 0	61 227	+70 7+00	228+2	26         R           TOTAL=           PLACE ROO           EROSI           PROTEC           -ocation           79+25           159+15           167+10           187+10	126' 901 II 901 II CK FOF ON TION Side of Road L L L L R
297+96 Beginning Station 30+50 33+56 206+43 206+97 208+00 208+67 232+35 292+80 HMA S Payed	K           TOTAL =           MISCE           Ending           Station           32+52           35+40           206+5           207+2           211+8           209+8           234+1           295+2           cuppers	435 ea           LLANEOU           Side c           Road           L           L           N           Road           L           L           R           R           R           R           R           R           R           R           R           R           R           R           -	J IS PAVIN of Avg 1 Wid 2.3 2.7 3.8 1.8 3.6 3.6 3.6 3.0 7.7 2.4 -	IG g. Appr th Area 3' 460 1' 380 3' 55 5' 140 0' 355 5' 140 0' 355 7' 135 7' 135 140 145	ox. (sf) 0 0 0 0 0 0 0 0 0 0 0 86	61 227	+70 7+00		26 R TOTAL= PLACE ROO EROSI PROTEC 00cation 79+25 159+15 167+10 187+10 262+80 296+42	126' 901 II CK FOF ON TION Side of Road L L L R R R R
Beginning Station 30+50 33+56 206+43 206+97 208+00 208+67 232+35 292+80 HMA S Paved D Paved	K           TOTAL =           MISCE           Ending           Station           32+52           35+40           206+5           207+2           211+89           20948           234+1           295+21           cuppers           Driveways           Turnouts	=       435 ea         LLANEOU       Side c         n       Road         2       L         0       L         1       R         7       R         9       R         5       L         1       R         8       R         -       -         -       -         -       -         -       -         -       -	J S PAVIN of Avg 1 Wid 2.3 2.7 3.8 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	IG g. Appr th Area 3' 460 1' 380 3' 300 3' 555 5' 140 0' 350 7' 1355 1' 600 1455 1455 362	ox. (sf) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 5	61 227	+70 7+00		26         R           TOTAL=           PLACE ROO           EROSI           PROTEC           .ocation           79+25           159+15           167+10           187+10           262+80           296+42           298+00	126' 901 II 901 II CK FOF ON TION Side of Road L L L R R R R
297+96 Beginning Station 30+50 33+56 206+43 206+97 208+00 208+67 232+35 292+80 HMA S Paved Dit Paved Dit	K           TOTAL =           MISCE           Ending           Station           32+52           35+40           206+5           207+2           211+8           209+8           234+1           295+2           cuppers           Driveways           Turnouts           ch Repair	=       435 ea         LLANEOU       Side c         n       Road         2       L         0       L         1       R         7       R         9       R         5       L         1       R         8       R         -       -         rs       -	J IS PAVIN of Avg 2.3 2.1 3.8 3.6 3.6 3.6 3.6 3.6 - - - - -	IG g. Appr th Area 3' 46 1' 38 3' 30 3' 55 5' 140 0' 35 7' 135 7' 135	ox.       (sf)       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       55       5	61 227	+70 7+00		26       R         TOTAL=         PLACE ROO         PROTEC         -ocation         79+25         159+15         167+10         282+80         296+42         298+00         TOTAL =	126' 901 II 901 II CK FOF ON TION Side of Road L L L R R R R R R R 7 ea
297+96 Beginning Station 30+50 33+56 206+43 206+97 208+00 208+67 232+35 292+80 HMA S Paved D Paved Dit	K           TOTAL =           MISCE           Ending           Statior           32+52           35+40           206+5           207+2           211+83           209+83           234+1           295+22           cuppers           Driveways           Turnouts           ch Repair	= 435 ea	J IS PAVIN of Avg 1 Wid 2.3 2.1 3.6 3.6 3.6 3.6 7.7 2.4 - - - - - - - - - - - - - - - - - -	IG p. Appr th Area 3' 460 1' 380 3' 55 5' 140 5' 140 7' 350 7' 135 5' 140 1450 1450 1450 975 AL= 25,92 AVEMENT	ox. (sf) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	61 227	+70 7+00		26         R           TOTAL=           PLACE ROO EROSI PROTEC           ocation           79+25           159+15           167+10           287+80           296+42           298+00           FOTAL =           CLEANOU	126' 901 II 901 II CK FOF ON TION Side of Road L L L R R R R R R 7 ea
297+96           Beginning           Station           30+50           33+56           206+97           208+00           208+67           232+35           292+80           HMA S           Paved Dit           Paved Dit           TREE R           Beginning	MISCE Ending Statior 32+52 35+40 206+5 207+2 211+8 209+8 234+1 295+2 Cuppers Driveways Turnouts ch Repair	=       435 ea         LLANEOU       Side c         g       Side c         1       R         2       L         0       L         1       R         9       R         5       L         1       R         8       R         -       -         rs       -         MOVAL U	J IS PAVIN of Avg 2.3 2.7 3.8 3.8 3.6 3.6 3.6 3.6 3.6 3.6 3.6 7.7 7.7 2.4 - - - - - - - - - - - - - - - - - - -	IG g. Appr th Area 3' 46 1' 38 3' 30 3' 55 3' 140 3' 35 5' 140 0' 35 7' 135 7' 135 7' 135 7' 135 7' 135 7' 135 7' 135 7' 135 7' 211 40 211 145 362 97 AL= 25,92 AVEMENT of	ox. (sf) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	61 227	+70 7+00		26         R           TOTAL=           PLACE ROO EROSI PROTEC           -ocation           79+25           159+15           167+10           282+80           296+42           298+00           FOTAL =           CLEANOU	126' 901 II 901 II CK FOF ON TION Side of Road L L L L R R R R R 7 ea
297+96 Beginning Station 30+50 33+56 206+43 206+97 208+00 208+67 232+35 292+80 HMA S Paved Dit Paved Dit TREE R Beginning Station	K         TOTAL =         MISCE         Ending         Station         32+52         35+40         206+5         207+2         211+8         209+83         234+1         295+22         Cuppers         Driveways         Turnouts         ch Repair	=       435 ea         LLANEOU       Side c         n       Road         2       L         0       L         1       R         9       R         5       L         1       R         8       R         -       -         rs       -         MOVAL U       Width	■ IS PAVIN of Avg 1 Wid 2.3 2.7 3.8 3.6 3.6 3.6 3.6 3.6 3.7 7.7 2.4 - - - - - - - - - - - - -	IG g. Appr th Area 3' 460 1' 380 3' 55 5' 140 0' 350 7' 135 5' 140 0' 350 7' 135 7' 135 140 0' 350 7' 135 140 0' 350 7' 135 7' 135	ox. (sf) 0 0 0 0 0 0 0 0 0 866 25 5 1 sf	61 227	+70 7+00		26         R           TOTAL=           PLACE ROOL           EROSI           PROTEC           -ocation           79+25           159+15           167+10           282+80           296+42           298+00           FOTAL =           CLEANOL           S           -ocation           IT0+43	126' 901 II 2K FOF ON TION Side of Road L L L R R R R R R 7 ea
297+96 Beginning Station 30+50 33+56 206+43 206+97 208+00 208+67 232+35 292+80 HMA S Paved Dit Paved Dit TREE R Beginning Station 28+10 42+44	MISCE Ending Station 32+52 35+40 206+5 207+2 211+8 20948 234+1 295+2 Cuppers Driveways Turnouts ch Repair OOT RE Ending Station 29+00 43+20	=       435 ea         LLANEOU       Side c         n       Road         2       L         0       L         1       R         7       R         9       R         5       L         1       R         8       R         -       -         rs       -         movAL U       Width         9'       9'         9'       9'	J IS PAVIN of Avg 1 Wid 2.3 2.7 3.8 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	IG g. Appr th Area 3' 460 3' 380 3' 555 5' 140 3' 355 5' 140 0' 355 7' 135 7' 135	ox. (sf) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	61 227	+70 7+00		26         R           TOTAL=           PLACE ROOL           PROTEC           -ocation           79+25           159+15           167+10           296+42           298+00           TOTAL =           CLEANOU           Socation           119+93           149+77	126' 901 II 901 II CK FOF ON TION Side of Road L L R R R R 7 ea
297+96 Beginning Station 30+50 33+56 206+97 208+00 208+67 232+35 292+80 HMA S Paved Dit Paved Dit Paved Dit TREE R Beginning Station 28+10 42+44 48+55	K           TOTAL =           MISCE           Ending           Station           32+52           35+40           206+5           207+2           211+8           209+8           234+1           295+2           cuppers           Driveways           Turnouts           ch Repair           OOT RE           Ending           Station           29+00           43+20           49+10	=       435 ea         LLANEOU       Side c         n       Road         2       L         0       L         1       R         7       R         9       R         5       L         1       R         8       R         -       -         rs       -         movAL U       Width         9'       9'         9'       9'         9'       9'	J IS PAVIN of Avg 2.3 2.1 3.8 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	IG g. Appr th Area 3' 46 1' 38 3' 55 3' 55 3' 140 3' 55 3' 140 3' 55 3' 25 3' 25	ox. (sf) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	61 227	+70 7+00		26         R           TOTAL=           PLACE ROOL           PROTEC           -ocation           79+25           159+15           167+10           187+10           262+80           296+42           298+00           FOTAL =           CLEANOU           _ocation           119+93           149+77           283+00	126' 901 II 2K FOF ON TION Side of Road L R R R R R 7 ea
297+96 Beginning Station 30+50 33+56 206+43 206+97 208+00 208+67 232+35 292+80 HMA S Paved Dit Paved Dit Paved Dit TREE R Beginning Station 28+10 42+44 48+55 150+85	K           TOTAL =           MISCE           Ending           Station           32+52           35+40           206+5           207+2           211+8           209+8           234+1           295+2           cuppers           Driveways           Turnouts           ch Repair           OOT RE           Ending           Station           29+00           43+20           49+10           151+15	=       435 ea         LLANEOU       Side c         n       Road         2       L         0       L         1       R         9       R         5       L         1       R         8       R         -       -         rs       -         movAL U       Width         9'       9'         9'       9'         9'       9'         9'       9'         9'       9'         9'       9'         9'       9'	→ IS PAVIN of Avg 1 Wid 2.3 2.7 3.8 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	IG g. Appr th Area 3' 460 1' 380 3' 55 5' 140 0' 350 7' 135 7' 135	ox. (sf) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	61 227	+70 7+00		26         R           TOTAL=           PLACE ROOI           PROTEC           -ocation           79+25           159+15           167+10           282+80           296+42           298+00           FOTAL =           CLEANOU           Socation           119+93           149+77           283+00           283+05           283+12	126' 901 II 2K FOF ON TION Side of Road L L R R R R R R 7 ea JTS ide of Road L L L L L R
297+96 Beginning Station 30+50 33+56 206+43 206+97 208+00 208+67 232+35 292+80 HMA S Paved Dit Paved Dit Paved Dit Paved Dit TREE R Beginning Station 28+10 42+44 48+55 150+85 155+70 164+59	K           TOTAL =           MISCE           Ending           Station           32+52           35+40           206+5           207+2           211+83           209483           234+1           295+22           Cuppers           Driveways           Turnouts           ch Repair           OOT RE           Ending           Station           29+00           43+20           49+10           151+15           155+88           164+85	=       435 ea         LLANEOU       Side c         n       Road         2       L         0       L         1       R         9       R         5       L         1       R         9       R         5       L         1       R         8       R         -       -         rs       -         rs       -         MOVAL U       Width         9'       9'         9'       9'         9'       9'         9'       9'         9'       9'         9'       9'	J IS PAVIN of Ave 2.3 2.7 3.8 3.6 3.6 3.6 3.0 7.7 2.4	IG g. Appr th Area 3' 460 1' 380 3' 55 5' 140 0' 355 5' 140 0' 355 7' 135 7' 135 7' 135 7' 135 7' 135 7' 235 7' 135 7' 135 7	ox. (sf) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	61 227	+70 7+00		26         R           TOTAL=           PLACE ROOLEROSI           PROTEC           -ocation           79+25           159+15           167+10           296+42           298+00           TOTAL =           CLEANOU           Socation           119+93           149+77           283+05           283+48	126' 901 II 901 II CK FOF ON TION Side of Road L L R R 7 ea JTS ide of Road L L L L L L L L
297+96 Beginning Station 30+50 33+56 206+43 206+97 208+00 208+67 232+35 292+80 HMA S Paved Dit Paved Dit Paved Dit Paved Dit Station 28+10 42+44 48+55 150+85 155+70 164+59 185+90	K           TOTAL =           MISCE           Ending           Statior           32+52           35+40           206+5           207+2           211+8           209+8           234+1           295+2           cuppers           Driveways           Turnouts           ch Repair           OOT RE           Ending           Station           29+00           43+20           49+10           151+15           155+88           164+85           186+10	435 ea         LLANEOU         Side c         NEOU         Side c         L         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N	J IS PAVIN of Avg 2.3 2.1 3.8 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	IG g. Appr th Area 3' 46 1' 38 3' 30 3' 55 5' 140 0' 35 7' 135 7' 135 7' 135 7' 135 7' 135 7' 211 145 362 97 4 211 145 362 97 4 40 211 145 362 97 4 4 495 270 108 234 120	ox. (sf) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	61 227	+70 7+00		26         R           TOTAL=           PLACE ROOL           PROTEC           -ocation           79+25           159+15           167+10           187+10           262+80           296+42           298+00           FOTAL =           CLEANOL           S           -ocation           119+93           149+77           283+00           283+05           283+48           283+50	126' 901 II CK FOF ON TION Side of Road L L R R 7 ea JTS ide of Road L L L L R R R R R R R R R R R R R

iputation	Notes         Install Marker         Install Marker         Install Marker         Install I Marker         Install I Marker         Install I 12" HDPE Connecting to D.S. #24         Install Christy Pre-Cast U37-FC Curb Inlet         & 12" HDPE Connecting to D.S. #23	Horizontal Adjustment (+Towards Roadway, -Away from Roadway) - - 0'' 0'' 0'' 0'' 0'' 0'' 0'' 0'' 0''	Vertical Adjustment (+Up, -Down) - - +3" +3" +3" +3" +3" +3" +3" +3" +3" +3"	Install Headwall - No Yes Yes No Yes No Yes Yes Yes Yes No No Yes	Min. Height of New Structure - - 54" 64" 54" 56" 50" 51" 55" 63" 55" 63" 52" 48" 48" 48"	Existing CMP size - - 18" 27" 15" 15" 24" 15" 15" 15" 15" 15" 15" 15" 15"	Directions of Flow Into Structure - 2 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2	Type of Work No Work No Work Replace Replace Replace Replace Replace Replace Replace Replace Replace	Type of Structure Ex. DI Type A Type A Type A Type A Type A Type A Type A Type A	Side of Road L L L L L L L L L	Location 305+50 32+55 36+30 38+42 40+21 44+00 46+21 51+21	Drainage Structure # 6 7 8 9
iputation	Notes         Install Marker         Install Marker	(+ Towards Roadway, -Away from Roadway) - - 0'' 0'' 0'' 0'' 0'' 0'' 0'' 0'' 0''	Adjustment (+Up, -Down) - - +3" +3" +3" +5" +3" +3" +3" +3" +3" +3" +3" +3" +3" +3	Install Headwall - No Yes Yes No Yes No Yes Yes Yes Yes No No Yes	New Structure - 54" 64" 54" 56" 50" 51" 55" 63" 55" 63" 52" 52" 48" 48" 48"	Existing CMP size - 18" 27" 15" 15" 24" 15" 15" 15" 15" 15" 15" 15" 15" 15"	Flow Into Structure - 2 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2	<ul> <li>Type of Work</li> <li>No Work</li> <li>No Work</li> <li>Replace</li> </ul>	Type of Structure Ex. DI Type A Type A Type A Type A Type A Type A Type A Type B	Side of Road L L L L L L L L L	Location 305+50 32+55 36+30 38+42 40+21 44+00 46+21 51+21	Drainage Structure # 6 7 7 8 9
iputation	Install Marker Install Marker Install Marker		- +3" +3" +3" +3" +3" +3" +3" +3" +3" +3"	- No Yes Yes No No Yes No Yes Yes No No Yes No No Yes	- - 54" 64" 54" 56" 50" 51" 55" 63" 52" 52" 48" 48" 48"	- - 18" 27" 15" 15" 24" 15" 15" 15" 15" 15" 15" 15" 15	- - 2 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2	No Work         No Work         Replace	Ex. DI Ex. DI Type A Type A Type A Type A Type A Type A Type A Type B		305+50 32+55 36+30 38+42 40+21 44+00 46+21 51+21	6 7 8 9
iputation	Install Marker	- 0" 0" 0" 0" 0" - 12" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0" 0"	- +3" +3" +3" +5" +3" +3" -3" +3" +4" +4" +3" +1" +3" +1" +3" +3" +3" +3"	- No Yes No No Yes No Yes Yes Yes No No No Yes	- 54" 64" 54" 56" 50" 51" 55" 63" 52" 52" 48" 48" 48"	- 18" 27" 15" 15" 24" 15" 15" 15" 15" 15" 15" 15" 15	- 2 1 1 1 1 1 2 2 2 2 2 2 2 2	No Work Replace Replace Replace Replace Replace Replace Replace Replace	Ex. DI Type A Type A Type A Type A Type A Type A Type A Type B		32+55 36+30 38+42 40+21 44+00 46+21 51+21	7 8 9
iputation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	0" 0" 0" +12" 0" 0" 0" 0" 0" 0" 0" 0" -24" 0" 0" -24" 18"	+3" +3" +3" +5" +3" -3" +3" +3" +3" +4" +3" +1" +3" +3" -2" +3" +3"	NoYesNoNoYesNoYesNoYesYesYesNoNoYesNoNoYes	54" 64" 56" 56" 50" 51" 55" 63" 52" 52" 48" 48" 48"	18"         27"         15"         24"         15"         15"         15"         15"         15"         15"         15"         15"         15"         15"         15"         15"         15"         15"         15"         15"         15"         15"         15"	2 1 1 1 1 2 2 2 2 2 2 2 2 2 2	Replace Replace Replace Replace Replace Replace Replace Replace	Type A Type A Type A Type A Type A Type A Type B		36+30 38+42 40+21 44+00 46+21 51+21	8 9
iputation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	0" 0" 0" +12" 0" 0" 0" 0" 0" 0" -24" 0" 0" -24" 18"	+3" +3" +5" +3" -3" +3" +3" +4" +4" +3" +1" +3" -2" +3" +3"	Yes No No Yes No Yes Yes Yes No No Yes	64" 54" 56" 50" 51" 55" 63" 52" 52" 48" 48" 48"	27" 15" 24" 15" 15" 15" 15" 15" 15" 15" 15	1 1 1 1 2 2 2 2 2 2 2 2 2	Replace Replace Replace Replace Replace Replace Replace Replace	Type A Type A Type A Type A Type A Type B		38+42 40+21 44+00 46+21 51+21	9
iputation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	0 0'' +12'' 0'' 0'' 0'' 0'' -24'' 0'' 0'' -24'' +24''	+3 +5" +3" -3" +3" +3" +4" +3" +1" +3" -2" +3" +3" +3"	YesNoYesNoYesYesYesYesYesNoNoNoYes	54" 56" 50" 51" 55" 63" 52" 52" 48" 48" 48" 48"	15" 15" 24" 15" 15" 15" 15" 15" 15" 15" 15	1 1 1 2 2 2 2 2 2 2	Replace Replace Replace Replace Replace Replace Replace	Type A Type A Type A Type A Type B		40+21 44+00 46+21 51+21	10
putation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	+12" 0" 0" 0" 0" 0" 0" -24" 0" 0" -18" +24"	+3" +3" -3" +3" +4" +4" +3" +1" +3" -2" +3" +3"	NoYesNoYesYesYesYesNoNoNoYes	50" 50" 51" 55" 63" 52" 52" 48" 48" 48" 48"	24" 24" 15" 15" 15" 15" 15" 15" 15" 15	1 1 2 2 2 2 2 2	Replace Replace Replace Replace w/Curb Inlet Replace	Type A Type A Type A Type B	L L	46+21 51+21	10
iputation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	0" 0" 0" 0" 0" 0" -24" 0" 0" 0" -18" +24"	+3" -3" +3" +4" +3" +1" +3" -2" +3" +3"	Yes No Yes No Yes Yes No No Yes	51" 55" 63" 52" 52" 48" 48" 48" 48"	15" 15" 15" 15" 15" 15" 15"	1 2 2 2 2 2 2	Replace Replace Replace w/Curb Inlet Replace	Type A Type A Type B	L	51+21	12
putation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	0" 0" 0" 0" -24" 0" 0" -18" +24"	-3" +3" +4" +3" +1" +3" -2" +3" +3"	NoYesNoYesYesNoNoYes	55" 63" 52" 52" 48" 48" 48" 48"	15" 15" 15" 15" 15" 15"	2 2 2 2 2	Replace Replace w/Curb Inlet Replace	Туре А Туре В	L		13
putation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	0" 0" 0" -24" 0" 0" -18" +24"	+3" +4" +3" +1" +3" -2" +3" +3"	Yes No Yes Yes No No Yes	63" 52" 52" 48" 48" 48" 48"	15" 15" 15" 15"	2 2 2	Replace w/Curb Inlet Replace	Туре В		54+70	14
iputation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	0" 0" -24" 0" -18" +24"	+4" +3" +1" +3" -2" +3" +3"	No Yes Yes No No Yes	52" 52" 48" 48" 49" 49"	15" 15" 15"	2 2	Replace		L	59+25	15
iputation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	0" -24" 0" 0" -18" +24"	+3 +1" +3" -2" +3" +3"	Yes Yes No No Yes	<u> </u>	15" 15"	2	I DODIOCO W/// TIPD IDIOT			63+73	16
putation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	-24" 0" 0" -18" +24"	+3" -2" +3" +3"	Yes No No Yes	48" 49" 48"	15"		Replace w/Curb Inlet	Туре В		66+96	17
putation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	0" 0" -18" +24"	-2" +3" +3"	No No Yes	49'' 48''	1 10	2	Replace	Type A	L	68+88	10
putation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	0" -18" +24"	+3" +3"	No Yes	48''	15"	2	Replace	Туре А	L	71+00	20
putation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	-18" +24"	+3"	Yes		24''	2	Replace	Туре А	L	75+79	21
putation	Install 12" HDPE Connecting to D.S. #24 Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	+24"			57"	15"	2	Replace	Туре А	L	85+61	22
putation	Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23	۰ <i>۲</i>	-3"	No	<u>/Q''</u>	15"	2	Renlace	Type A		89+61	23
putation	Install Christy Pre-Cast U37-FC Curb Inlet & 12" HDPE Connecting to D.S. #23		-J		<del>4</del> 0		۷.					20
<i>Ing Inc.</i> ₽putation	& 12" HDPE Connecting to D.S. #23											
<i>ing Inc.</i> ₽putation		-	-	No	-	-	1	Install	Туре С	R	90+35	24
<i>ing Inc.</i> ₽putation		+36"	-4"	No	48"	15"	2	Replace			92+35	25
putation		0"	+3"	NO	51" /8"	15"	2	Replace	Type A		94+76	26
<i>ng I</i> ₽putatio		-24"	+3"	Yes	48"	15"	1	Replace w/Curb Inlet			102+35	28
<b>ng</b>		+18"	+3"	No	55"	15"	1	Replace	Туре А	L	106+73	29
		0''	+4"	Yes	49''	15"	1	Replace	Туре А	L	107+73	30
		0''	+5"	No	55"	24"	1	Replace	Туре А	L	111+48	31
. <b>r</b> e 301.		0''	+5"	No	48"	15"	1	Replace			116+12	32
		0''	+3"	Yes	55	24	1	Replace w/Curb Inlet	Type A		121+06	34
e, s 334.0		0''	+3"	No	48"	15"	1	Replace	Type A	L	125+58	35
		0''	+6"	No	48''	15"	1	Replace	Туре А	L	130+09	36
		0''	+4"	No	54''	24''	1	Replace	Туре А	R	137+95	37
		0"	+3"	No	50"	15"	1	Replace	Type A	L	146+22	38
		U"	+3"	INO Ves	51"	15"	1	Replace			151+50	39
Ci C		0"	+3"	No	57"	24"	1	Replace		R	172+40	40
2 Corp 2 Corp 2 A85 2 A8		-24"	+6"	Yes	53"	15"	1	Replace	Туре А	L	176+90	42
		0''	+3"	No	61''	24''	1	Replace	Туре А	L	183+00	43
	Contractor will need to do rock excavation	011					4				400.45	
	to install new Drainage Structure	<u> </u>	+3"	N0 Ves	48"	15"	1	Replace w/Curb Inlet	Туре В		193+15	44
		0''	+5"	No	<u> </u>	15"	1	Replace		R	211+92	46
		-12"	+5"	Yes	48"	15"	1	Replace	Туре А	R	215+78	47
		0''	+3"	No	61"	24''	1	Replace	Туре А	R	217+99	48
	Install Marker	-	+3"	-	58''	-	-	No Work	Ex. DI	R	222+00	49
		0"	+3"	No	55"	24"	1	Replace			224+26	50
		0"	+3 +3"	No No	52" 52"	15" 15"	1	Replace	Type A	R	220+75	52 52
	Contractor will need to do rock excavation	<b>y</b>			52		•		.,,,,,,			<u> </u>
<u> </u>	to install new Drainage Structure	0''	+6''	Yes	57"	24"	1	Replace w/Curb Inlet	Туре В	R	238+78	53
പ്പ്പ്പ്പ്പ		0''	+4"	No	50"	15"	1	Replace	Туре А	R	243+59	54
		0"	+0"	No	52"	24"	1	Replace			244+17	55
_ <b>~ ĭ</b> í		+36"	+2/"	NO No	69''	24'' 15''	1	Replace	Type A	R R	240+38	50 57
5 Z H		0"	+3"	No	<u> </u>	15"	1	Replace		R	251+46	58
		0''	+3"	No	48"	15"	1	Replace	Туре А	R	254+21	59
		0''	+3"	No	52"	15"	1	Replace	Туре А	R	257+81	60
″ <u>∠</u>   <u>≺</u>		+24"	+5"	No	49"	15"	1	Replace	Туре А		265+00	61
		U"	+5" +6"	NO No	49"	15"	1	Replace			268+33	62
ī Ē 🗸		0"	+4"	No	50 48''	15"	1	Replace			275+36	64
> ₩  <b>&gt;</b>		+24"	+3"	No	48"	15"	1	Replace	Type A		277+62	65
		0''	+6''	No	55"	15"	1	Replace	Туре А	L	282+11	66
≰ ₩ O		-	-	-	-	-	-	No Work	Ex. DI	R	282+12	67
5 <b>5 2</b>		0''	+6''	No	55"	15"	1	Replace	Туре А	L	287+42	68
								51 ea		LIOTAL=		
<u></u> 16 ц								0 ta				
Σ ŘΙΟ												

		PAVED D	RIVEWAYS/TRANSITION	S	
Beginning	Ending	Side of	Owner of Property Or	Offset from	
Station	Station	Roadway	Name of Road	New EP	Are
78+77	79+35	L	McQueen (Owner)	60'	1
97+50	98+00	R	Loma Prieta Road	20'	7
149+20	149+75	R	Stott (Owner)	20'	6
158+45	159+20	L	Mid-Peninsula (Owner)	10'	5
172+90	173+55	R	Hlebo (Owner)	47'	12
173+22	173+55	L	Mid-Peninsula (Owner)	5'	3
188+50	189+45	L	Mid-Peninsula (Owner)	N/A	10
254+30	254+70	L	Rosetta (Owner)	13'	4
262+20	262+82	R	Quane (Owner)	22'	1
262+70	263+10	L	Rosetta (Owner)	48'	9
288+40	289+00	L	PG&E Access Road	60'	1
			Upper Wood Trail Head		
296+40	296+68	L	Parking Lot Entrance	22'	4
			Lower Wood Trail Head		
296+75	297+33	L	Parking Lot Entrance	40'	1
300+88	301+32	R	McQueen (Owner)	20'	7
301+00	301+45	L	McQueen (Owner)	40'	1

				3' WIDE	E PCC S	WALE
				Approx.	Side of	
	PCC Cl	JRB		Location	Road	Length
Beginning	Ending	Side of		79+00	L	44'
Station	Station	Road	Length	159+00	L	48'
31+24	31+85	R	61'	173+25	R	40'
306+18	306+70	L	52'	188+75	L	33'
400+28	401+04	R	76'	262+50	R	38'
	Т	OTAL =	189 lf	Т	OTAL =	203 lf

Ν	S		
	Offset from		
	New EP	Area (sf)	
	60'	1923	
	20'	779	
	20'	617	
)	10'	525	
	47'	1297	
)	5'	326	
)	N/A	1675	
	13'	423	
	22'	1131	
	48'	950	
	60'	1548	
d			
	22'	440	
d			
	40'	1105	
	20'	742	
	40'	1105	
	TOTAL=	14,586 sf	

		PAV	EMENT R	EPAIRS		
				Area of	Area of	
Beginning	Ending	Side of		Shallow	Deep	Geogrid
Station	Station	Road	Width	Repairs	Repairs	Material (sf)
102+95	106+00	R	9'	2745		2745
108+00	109+00	R	9'	900		900
119+25	120+25	R	9'	900		900
169+00	171+80	L	9'	2520		2520
211+30	213+00	L	9'		1530	3060
226+45	228+08	L	9'	1467		1467
233+80	234+95	L	9'	1035		1035
237+40	239+35	Both	18'		3510	7020
244+15	244+75	L	9'	540		540
245+85	247+17	Both	18'		2376	4752
255+50	258+55	Both	18'		5490	10980
259+45	261+02	Both	18'	2826		2826
267+50	268+75	R	9'	1125		1125
270+20	270+83	Both	18'	1134		1134
279+65	280+25	R	9'	540		540
280+65	281+30	R	9'	585		585
289+00	291+55	L	9'	2295		2295
			TOTAL=	18,612 sf	12,906 sf	44,424 sf



		R0/	ADSIDE SIGNAGE	
	Side of	Type of		Sign Designation
Location	Road	Work	Type of Sign	(MROSD*)
31+80	R	Install	Stop	R1-1
33+00	R	Install	25 MPH Speed Limit	R2-1 (25)
68+30	L	Install	Falling Rock	W50-1 (CA)
78+80	L	Install	No Parking	R26 (CA)
78+80	L	Install	Private Drivewav	TR-6*
81+50	R	Install	No Parking	R26 (CA)
94+70	L	Install	Falling Rock	W50-1 (CA)
95+10	R	Install	Curve	W1-2A (20) (Leff
98+00	R	Install	No Parking	R26 (CA)
98+00	R	Install	Private Driveway	TR-6*
98+35	R	Protect	Low Gear	-
98+55	L	Install	Curve	W1-2A (20) (Righ
98+70	R	Replace	25 MPH Speed Limit	R2-1 (25)
99+00	R	Install	Curve	W1-2A (20) (Leff
101+87	L	Install	Curve	W1-2A (20) (Righ
103+50	L	Install	Falling Rock	W50-1 (CA)
122+50	L	Install	Falling Rock	W50-1 (CA)
131+10	R	Install	Curve	W1-2A (20) (Riah
134+25	L	Install	Curve	W1-2A (20) (Lef
137+30	R	Install	Curve	W1-2A (20) (Lef
140+14	R	Install	No Parking	R26 (CA)
142+00	R	Install	Curve	W1-2A (20) (Riał
144+50	L&R	Remove	Trespassing	-
149+75	R	Install	No Parking	R26 (CA)
149+75	R	Install	Private Driveway	TR-6*
158+68	L	Install	No Parking	R26 (CA)
159+04	R	Install	No Parking	R26 (CA)
173+24	L	Install	No Parking	R26 (CA)
173+55	R	Install	No Parking	R26 (CA)
173+55	R	Install	Private Drivewav	TR-6*
188+51	L	Install	No Parking	R26 (CA)
198+50	L	Install	Falling Rock	W50-1 (CA)
204+30	L	Remove	Trespassing	-
204+30	L	Install	25 MPH Speed Limit	R2-1 (25)
205+45	L	Protect	Trailhead	-
206+45	R	Protect	Crosswalk	-
206+52	L	Protect	Crosswalk	-
208+00	R	Install	25 MPH Speed Limit	R2-1 (25)
220+90	L	Install	No Parking	R26 (CA)
226+50	R	Install	Falling Rock	W50-1 (CA)
230+05	R	Install	Falling Rock	W50-1 (CA)
237+80	R	Install	Falling Rock	W50-1 (CA)
239+00	R	Install	Curve	W1-2A (20) (Riah
241+90	L	Install	Curve	W1-2A (20) (Leff
254+34	L	Install	No Parking	R26 (CA)
254+34	L	Install	Private Driveway	TR-6*
262+70	L	Protect	No Parking	R26 (CA)
262+70	L	Install	Private Driveway	TR-6*
262+82	R	Install	No Parking	R26 (CA)
262+83	R	Install	Private Driveway	TR-6*
277+50	R	Install	No Parking	R26 (CA)
283+76	L	Install	Falling Rock	W50-1 (CA)
288+20	L	Install	No Parking	R26 (CA)
288+20	L	Install	No Stoppina	R26(S) (CA)
293+70		Replace	25 MPH Speed Limit	R2-1 (25)
294+23		Protect	Trailhead	-
298+10	R R	Install	Stop	R1-1
		Install	Stop	R1_1
306+22				
306+22 306+68	R	Install	Vield	R1_2
306+22 306+68 401+00	R	Install	Yield	R1-2

ROADSIDE	PADDLES
	Side of
Location	Road
33+87	R
36+56	R
49+10	R
49+65	R
50+30	R
56+40	R
60+50	R
61+50	R
62+23	R
62+40	R
72+55	R
73+95	R
86+00	R
111+90	R
112+55	R
113+08	R
113+55	R
124+10	R
127+40	R
128+42	R
147+25	R
147+58	R
153+20	R
154+75	R
158+55	R
158+72	R
163+30	R
165+45	R
168+30	R
170+00	
170+87	
170+07	
172+08	
180+20	
181+32	
191+70	
182+25	
185+60	
186+10	
186+80	
187+85	
199+20	
100+20	
100+50	R D
196+55	R
199+45	
200+40	ĸ
201+30	
220+35	
220+70	
221+/5	
222+30	
232+55	
233+05	
233+48	
233+90	
235+12	
236+45	
237+50	
241+50	
241+85	L
242+25	L
242+90	L
253+20	L
269+35	R
284+18	R
287+35	R
1 295+15	R
233143	

	D			1								Г			POAD			
		Centerline (Single/Double				HMA Su	rface Course	רדי שוא Y Width	Pulverized	d Or <u>CIR Ba</u>	se Width	F			HMA Su	face Course Width	Pulverized Or CIR Base	Width
Station	Left Detail 27B	4" Yellow OR Caltrans Detail 40)	Right	Beginning	Ending	Width Left	Width Right	t Total Width	Width Left	Width Right	t Total	E	Beginning	Ending	Width Left	Width Right Total	Width Left Width Right	Total Width
30+00	Start 27B	Start Single	Start 27B	30+00	32+58	9'	9'	18'	9'	9'	18'	F	182+00	182+50	10.17'	10.17' 20.34'	9' 9'	18'
30+32		End Single, Start Detail 40	End 27B	32+58	33+56	10.17'	9'	19.17'	9'	9'	18'	F	182+50	183+03	9'	10.17' 19.17'	9' 9'	18'
31+20		End Detail 40, Start Single End Single, Start Detail 40	End 27B	36+16	36+92	9 9'	9 10.17'	19.17'	9 9'	9'	18		184+86	187+00	10.17	9' 19.17'	9 9	18'
32+00			Start 27B	<u>36+92</u> 36+98	36+98 39+25	9' 9'	9' 10 17'	18' 19.17'	9' 9'	9' 9'	18'		187+00 189+45	189+45 191+40	9' 10.17'	9' 18' 9' 19.17'	9' 9' 9'	18' 18'
32+46 78+72	End 27B	End Detail 40, Start Single End Single		39+25	42+25	9'	9'	18'	9'	9'	18'	E	191+40	193+12	11.50'	9' 20.50'	9' 9'	18'
79+40	Start 27B	Start Single		42+25	44+79 46+23	9' 9'	10.17' 9'	19.17' 18'	9' 9'	9' 9'	18' 18'	-	193+12 193+18	193+18 196+30	9' 11.50'	9' 18' 10.17' 21.67'	9' 9' 9'	18' 18'
95+10 97+45		End Single, Start Double End Double	Fnd 27B	46+23	49+18	9'	10.17'	19.17'	9'	9'	18'	F	196+30	196+36	9'	10.17' 19.17'	9' 9'	18'
98+05		Start Double	Start 27B	49+18 49+23	49+23 50+78	9' 9'	9' 10.17'	18' 19.17'	9' 9'	9' 9'	18' 18'	F	196+36 197+50	197+50 202+50	11.50' 9'	<u>    10.17'      21.67'    </u> 10.17'       19.17'	9' 9' 9'	18' 18'
98+55 99+00		End Double, Start Single End Single, Start Double		50+78	51+17	9'	9' 10.17'	18'	9' 0'	9'	18'	F	202+50	202+56	9'	9' 18'	9' 9'	18'
101+87		End Double, Start Single		52+98	54+90	9'	9'	19.17	9 9'	9'	18		202+30	203+45	9'	9' 18'	9 9	18'
131+10		End Single, Start Double		54+90 59+17	59+17 59+22	11.50' 11.50'	9' 10.17'	20.50'	9' 9'	9' 9'	18'	-	206+80	207+27	10.17'	9' 19.17' 10.17' 20.34'	9' 9' 9' 9'	18' 18'
137+30		End Single, Start Double		59+22	59+28	9'	10.17'	19.17'	9'	9'	18'	F	208+00	208+67	10.17'	9' 19.17'	9' 9'	18'
142+00		End Double, Start Single End Single	Fnd 27B	59+28	59+90 61+70	11.50 <sup>°</sup> 11.50'	10.17' 9'	21.67	9' 9'	9' 9'	18' 18'	F	208+67 209+85	209+85	9' 10.17'	<u> </u>	9' 9' 9'	18' 18'
149+80	$\checkmark$	Start Single	Start 27B	61+70	63+22	9' 0'	9' 10.17'	18'	9' 0'	9'	18'	F	211+95	212+03	10.17'	10.17' 20.34'	9' 9'	18'
158+40	End 27B Start 27B	End Single		64+47	64+53	9'	9'	18'	9' 9'	9'	18		212+03	212+09	9 10.17'	10.17' 19.17	9'9'	18'
172+85		End Single	End 27B	64+53 64+80	64+80 65+09	9' 11.50'	10.17'	19.17' 21.67'	9' 9'	9' 9'	18' 18'	-	213+75	215+15	9' 10.17'	10.17' 19.17' 10.17' 20.34'	9' 9' 9' 9'	18' 18'
173+18	End 27B	Start Single	Stort 27P	65+09	65+15	9'	10.17'	19.17'	9'	9'	18'	E	215+63	216+25	10.17	9' 19.17'	9' 9'	18'
188+40	End 27B	End Single		. <u>65+15</u> 66+40	66+40 66+93	11.50' 11.50'	10.17' 9'	21.67' 20.50'	9' 9'	9' 9'	18' 18'	-	216+25 217+25	217+25 217+45	10.17' 9'	<u>    10.17'     20.34'                                    </u>	9' 9' 9' 9'	<u>18'</u> 18'
189+50	Start 27B	Start Single		66+93	66+99	9'	9'	18'	9'	9'	18'		217+45	218+02	9'	9' 18'	9' 9'	18'
206+95		Start Single	Start 27B	66+99	67+80 68+75	11.50 <sup>°</sup> 10.17'	9' 9'	19.17	9'	9' 9'	18 <sup>°</sup> 18'	F	218+02	220+00	9' 9'	<u> </u>	9' 9' 9'	18' 18'
239+00		End Single, Start Double		68+75	69+52	9' Q'	9' 10 17'	18' 19 17'	9' a'	9' a'	18' 18'	F	221+63	224+72	10.17' o'	9' 19.17' 9' 19.17'	9' 9' 9'	18' 18'
254+25	End 27B	End Double, Start Single End Single		69+52 69+67	69+73	9'	9'	18'	9'	9'	18'	F	224+72 224+78	225+53	9 10.17'	9' <u>19</u> .17'	9' 9'	18'
254+75	Start 27B	Start Single		69+73 71+96	71+96	9' 9'	10.17' 9'	19.17'	9' 9'	ġ ġ	18' 18'	F	225+53	225+59	9' 10.17'	9' 18' 9' 19.17'	9' 9' 9'	18'
262+15	End 27B	End Single	End 27B	74+70	78+33	9'	10.17'	19.17'	9'	9'	18'		225+78	227+00	10.17	10.17' 20.34'	9' 9'	18'
262+87			Start 27B	78+33 78+47	78+47 78+59	9' 9'	9' 10.17'	18' 19.17'	9' 9'	9' 9'	18' 18'	-	227+00 228+00	228+00 228+25	10.17' 9'	<u>11.50'</u> 21.67' 11.50' 20.50'	9' 9' 9' 9'	18' 18'
263+15 288+35	Start 27B End 27B	Start Single End Single		78+59	83+90	9'	9'	18'	9'	9'	18'		228+25	230+55	9'	9' 18'	9' 9'	18'
289+05	Start 27B	Start Single		83+90	84+77	9' 9'	10.17' 9'	19.1 <i>7</i> 18'	9' 9'	9' 9'	18' 18'	-	230+55 230+80	230+80 232+35	9' 10.17'	<u>11.50'</u> <u>20.50'</u> 11.50' <u>21.67'</u>	9' 9' 9'	18' 18'
296+30 297+35	End 27B Start 27B	End Single Start Double		84+83	85+77	9'	10.17'	19.17'	9' 0'	9'	18'	F	232+35	234+69	10.17'	9' 19.17'	9' 9'	18'
298+25	End 27B	End Double	End 27B	85+83	86+05	9 9'	9 10.17'	19.17'	9 9'	9'	18		234+69 234+75	234+75	9 10.17'	9 18 9' 19.17'	9 9	18'
301+74	Start 27B	Start Single	Start 27B	86+05 90+00	90+00 90+38	9' 10.17'	9' 9'	18' 19 17'	9' 9'	9' 9'	18' 18'	-	234+95	235+42	10.17' 9'	<u>10.17'</u> <u>20.34'</u> 10.17' <u>19.17'</u>	9' 9' 9' 9'	18' 18'
306+15	Start 27B	End Detail 40, Start Single		90+38	91+00	10.17	10.17'	20.34	9'	9'	18'		236+50	236+60	9'	9' 18'	9' 9'	18'
306+80	End 27B	End Single	End 27B	91+00 91+96	91+96 92+01	9' 9'	10.17' 9'	19.17' 18'	9' 9'	9' 9'	18' 18'	$\vdash$	236+60 238+30	238+30 238+48	10.17' 10.17'	<u>9' 19.17'</u> 11.50' 21.67'	9' 9' 9' 9'	
400+00		End Detail 40, Start Single	Start 27B	92+01	92+50	9' 11 EO'	10.17'	19.17'	9'	9'	18'	F	238+48	238+53	9'	11.50' 20.50'	9' 9'	18'
401+00		End Single	End 27B	92+50	93+15	11.50 <sup>-</sup> 11.50 <sup>-</sup>	9'	21.67	9' 9'	9	18	E	238+53	238+75	10.17	9' 19.17'	9 9 9' 9'	18'
401+97	End 27B			94+20	96+50 97+45	9' 9'	9' 11.50'	18' 20.50'	9' 9'	ັ ຫຼັ ຫຼັ	18' 18'	F	238+81	239+68	10.17' 9'	11.50' 21.67' 11.50' 20.50'	9' 9' 9'	18'
				97+45	98+73	9'	9'	18'	9'	9'	18'		240+25	241+80	9'	10.17' 19.17'	9' 9'	18'
				98+73 100+80	100+80	10.17' 11.50'	9' 10.17'	19.17' 21.67'	9' 9'	9' 9'	18' 18'	$\vdash$	241+80 242+25	242+25 244+45	10.17' 10.17'	<u>10.17'</u> 20.34' 9' 19.17'	9' 9' 9' 9'	
				102+32	102+38	9' 11 EOI	10.17'	19.17'	9'	9'	18'	F	244+45	244+51	9'	9' 18'	9' 9'	18'
				102+38	103+00	9'	10.17	19.17	9 9'	ຶ່ງ ວັ	18'		244+51 244+61	244+61	9'	<u> </u>	9 9	18'
				106+43	106+48	9' 9'	9' 10 17'	18' 19 17'	9' 9'	ġ ġ	18' 18'	-	246+00	247+39 247+46	10.17' 9'	9' 19.17' 9' 18'	9' 9' 9'	18'
				106+71	107+85	9'	9'	18'	9'	9'	18'		247+46	247+50	10.17'	9' 19.17'	9' 9'	18'
				107+85	109+10	9' 9'	10.17' 9'	19.17' 18'	9' 9'	9' 9'	18' 18'		247+50 250+18	250+18 252+18	9' 10.17'	9' 18' 9' 19.17'	9' 9' 9' 9'	<u>18'</u> 18'
				109+16	111+64	9'	10.17'	19.17'	9'	9'	18'		252+18	252+24	9'	9' 18'	9' 9'	18'
				111+64 111+70	111+70	9' 9'	9' 10.17'	18 19.17	9'	9' 9'	18 <sup>-</sup> 18'	F	252+24 252+30	252+30 255+38	10.17 <sup>-</sup> 9'	<u> </u>	9' 9' 9'	18'
				114+50	115+79	9' 9'	9' 10.17'	18'	9' 9'	9'	18'	F	255+38	256+05	10.17'	9' 19.17' 10.17' 20.34'	9' 9' 9'	18'
				117+98	118+04	9'	9'	18'	9'	9'	18'	E	256+92	257+35	9'	10.17' 19.17'	9' 9'	18'
				<u>118+04</u> 118+60	118+60	9' 11.50'	10.17' 10.17'	19.17' 21.67'	9' 9'	9' 9'	18' 18'	-	257+35 257+84	257+84 262+00	9' 9'	<u> </u>	9' 9' 9' 9'	18' 18'
				120+25	121+03	11.50'	9'	20.50'	9'	9'	18'		262+00	268+85	9'	9' 18'	9' 9'	18'
				121+03 121+09	121+09	9' 11.50'	9' 9'	18' 20.50'	9' 9'	9' 9'	18' 18'	┝	∠o8+85 270+62	∠70+62 270+68	9' 9'	9' 19.17'	9' 9' 9'	18' 18'
				122+80	123+00	11.50'	10.17'	21.67'	9' 0'	9' 0'	18' 19'	F	270+68	270+88 272±20	9' o'	10.17' 19.17'	9' 9' q' 0'	18'
				123+00	124+74	9 9'	9'	19.17	9 9'	9' 9'	18	E	270+88	272+30	9 9'	<u> </u>	9 9	18'
				124+80	124+94	9' 9'	10.17' 9'	19.17'	9' 9'	9' 9'	18' 18'		274+52	274+58	9' 9'	9' 18' 10 17' 19 17'	9' 9' 9' 9'	18' 18'
				131+00	136+77	9'	10.17'	19.17'	9'	9'	18'		274+73	277+65	9'	9' 18'	9' 9'	18'
				136+77	137+45	10.17' 10.17'	10.17' 9'	20.34'	9' 9'	9' 9'	18' 18'		277+65 279+35	279+35 282+08	10.17' 10.17'	9' 19.17' 10.17' 20.34'	9' 9' 9' 9'	<u>18'</u> 18'
				141+72	141+78	9'	9'	18'	8'	8	16'		282+08	282+10	9'	10.17' 19.17'	9' 9'	18'
				141+78	142+50	10.17	9' 9'	19.17	<u>8</u> 9'	<u> </u>	16 <sup>°</sup> 18'	F	282+10	282+13	9' 9'	<u>9' 18'</u> 10.17' 19.17'	9' 9' 9' 9'	18'
				143+50	149+75	9' a'	9' 10 17'	18' 19 17'	9' a'	9' a'	18'	F	282+14	282+17 283+26	11.50'	10.17' 21.67' 9' 20.50'	9' 9' 9' 0'	18'
				153+46	153+51	9'	9'	18'	9'	9'	18'	E	283+26	283+48	9'	9' 18'	9' 9'	18'
				153+51 154+42	154+42	9' 9'	10.17' 9'	19.17'	9' 9'	9' 9'	18' 18'	F	283+48 289+40	289+40 290+35	9' 9'	10.17' 19.17' 9' 18'	9' 9' 9' 9'	<u>18'</u> 18'
				156+33	157+80	10.17'	9'	19.17'	9'	9'	18'	E	290+35	292+80	9'	10.17' 19.17'	9' 9'	18'
				157+80 159+20	159+20 161+90	9' 9'	9' 10.17'	18' 19.17'	9' 9'	9' 9'	18' 18'	┝	292+80 295+46	295+46 297+94	9' 9'	9' 18' 10.17' 19.17'	9' 9' 9' 9'	<u>18'</u> 18'
				161+90	162+97	9'	9'	18'	9'	9'	18'	F	297+33	297+77	40.00	TRANSITION ROA	DWAY WITH TO 24'	
				162+97 164+64	164+64 173+55	10.17' 9'	9' 9'	19.17' 18'	9' 9'	9' 9'	18' 18'	⊢	297+7 297+94	∠97+94 298+25	12.00' 12'	<u>13.17'</u> 25.17' <u>12'</u> 24'	12' 12' 12' 12'	<u>24'</u> 24'
				173+55	175+82	9'	10.17'	19.17'	9' C'	9' C	18'	F	300+00	300+66	8.17	7 15.17'		14'
				175+82	175+88	9'	9 10.17'	19.17'	9'	9' 9'	18'	⊢	300+66	305+00	9'	9' 18'	9' 9' 10'18'	18'
				176+93 180±46	180+46	10.17'	10.17' 9'	20.34'	9' 9'	9' 9'	18'	F	305+00	306+00 306+88	9' 9'	10.17' 19.17' 9' 18'	9' <u>9</u> '	18' 18'
					1.52.00			1	L Ž			F	400+00	401+97	9'	9' 18'	9' 9'	18'

	r reputation	ite A -6015	REV DATE DESCRIPTION APP
Pavement Engine	UMUNHUM ROAD REHABILITATION PROJECT	ITEM OF WORK TABLES	
CON DRAWN B PROJECT SCALE: DATE: SHEET NU	Y: JI NUMBEF 150 1"= MAY JMBER: T	FOR 2016 <b>.3</b>	NC

и				[	ED	GE T	REA <sup>®</sup>	TME Iter	ENT: L ms of \	.EF Worl	T SIE k	DE OF	F R(	DAD			Feature	es to R	emain	ч			EDGE	E TR	EATM	ENT: L It	EFT SIL	DE OF Vork	ROAL	(CON	TINU	JED	) Feature	es to R	emain	
eginning Stati	nding Station	MA Dike	houlder	acking	-Ditch	uardrail/ End erminal	oncrete	arrier	aved riveway/ ansition		MA Scupper	rainage tructure	aved Ditch	dge Drain	CC Curb	isc. Paving	aved Or oncrete itch	rainage tructure	sphalt houlder	eginning Stati	nding Station	MA Dike	houlder acking	-Ditch	uardrail/ End erminal	oncrete arrier	aved riveway/ ansition	urnout MA Scupper	rainage	aved Ditch		isc. Paving	aved Or oncrete itch	rainage tructure	sphalt houlder	
<u> </u>	ш 30+50		<u>م</u> د X			<u>0 Ĕ</u>			άοϝ					<u>.</u>	ă.	∑		<u>ت</u> ت	<u> </u>	m 162+97	ш 164+64	Т Х	<u>ю щ</u>	<u>&gt;</u>	ŰĔ	ŬШ						_Σ		<u>ت</u> ت	<u> </u>	
30+50	32+52															^		X		164+64	167+17		X	X												
32+58 33+56	33+56 35+40															Х				167+17 173+22	173+22 173+55		X				x									
35+40 36+00	36+00 36+27		X		X											_				173+55 176+87	176+87 176+93			X					X							
36+27 36+33	36+33 38+39	-			X			_				X	-			_				176+93 182+50	182+50 182+97	X		X								_				
38+39 38+45	38+45 40+18				x							Х								182+97 183+03	183+03 187+00	x							X							
40+18	40+24											Х								187+00	188+50			X			v									
40+24 43+97	43+97 44+03				<u>^</u>							X								189+45	189+45 191+40	x														
44+03 46+18	46+18				<u>x</u>							X								191+40 193+12	193+12 193+18					X			x							
46+24 51+18	51+18 51+24				X							X								193+18 196+30	196+30 196+36					X			x							
51+24 54+67	54+67 54+73	+			<u>X</u>			+		-	-	x	+			+				196+36 197+50	197+50 204+45	┢		x		X			-			-				
54+73 54+90	54+90 59+22				X		X									_				204+45 206+64	206+64 206+80		X		X											
59+22 59+28	59+28 61+70	-					Y	+				X	+							206+80	206+89	X			X											
61+70	63+70				x							X								207+23	207+23	X			Х											
63+70	63+76 63+90				X								$\pm$							207+48 208+67	208+67											x				
63+90 64+80	64+80 65+09		X		X		X													209+85 212+03	212+03 212+09	X						X								
65+09 65+15	65+15 66+93	-					X			_	-	X	+			_				212+09 213+00	213+00 213+75	X X			Х							-				
66+93 66+99	66+99 67+80						X					X				_				213+75 215+15	215+15 217+25	x			Х											
67+80 68+75	68+75 68+85	X			x								+							217+25	219+90 220+76	-	x		Х											
68+85 68+01	68+91 60+50											Х								220+76	221+63							X				_				
69+50	70+67		X		<u>^</u>															221+03	224+72							×								
70+67 70+97	70+97 71+03				X							X								224+78 225+53	225+53 225+59							x								
71+03 74+82	74+82 75+70		X		X X											_				225+59 226+40	226+40 228+00	X X			Х											
75+70 75+76	75+76 75+82				X							X				_				228+00 230+80	230+80 234+69	x			Х											
75+82 78+77	78+77 79+35				X				Х											234+69 234+75	234+75 235+42	x						X				_				
79+35 81+70	81+70 82+16	1	X		x			-					+			4				235+42 236+33	236+33 236+60		x		Х											
82+16	84+32				X															236+60	238+48	x														
85+12	85+58 85+58				<u>^</u> X															238+48	239+68	x							· 							
85+58 85+64	85+64 89+10				X							X								239+68 241+23	241+23 241+80		X		X											
89+10 89+58	89+58 89+64		X X		<u>X</u>							X				_				241+80 244+45	244+45 244+51	X						X	<u> </u>							
89+64 89+80	89+80 90+00	-	X		<u>X</u> X			_					_			_				244+51 244+61	244+61 244+90	X		x												
90+00 91+00	91+00 91+70	X			x											_				244+90 246+00	246+00 247+39	x	X									_				
91+70 92+32	92+32 92+38		X		X							x								247+39	247+46	x						×				_				
92+38	92+50		X		x		v													247+50	250+18		X													
92+30 94+20	94+20 94+73				x															252+18	252+18							x								
94+73 94+79	94+79 98+67				x							×								252+24	252+30 254+30		X													
98+67 98+73	98+73 100+80	x										X								254+30 254+70	254+70 255+38		X				X									
100+80 102+32	102+32 102+38						X					X				_				255+38 256+92	256+92 256+98	X						x	<u> </u>							
102+38 103+00	103+00 106+70				X		X	_								_				256+98 261+35	261+35 262+15		X		Х											
106+70 106+76	106+76 107+70				x							Х								262+15 262+70	262+70 263+10		X				x									
107+70	107+76				x							Х								263+10 264+97	264+97 265+03	-		X					×			_				
110+15	111+38		X		X															265+03	268+30 268+36			X					×							
111+45	111+51	1					-	+		+	1	x	+	1						268+36	273+24	$\downarrow$		x				++								
116+09	116+09				<u>^</u>					+	1	x	+			+				273+24 273+30	275+30 275+33	$\vdash$		x												ļ
116+15 118+54	118+54 118+60				X					+		x	+							275+33 275+39	275+39 277+59			x												ļ
118+60 121+03	121+03 121+09						X	-		+	+-	X	+	_						277+59 277+65	277+65 282+08	x		+				++	X			+				ļ
121+09 123+00	123+00 125+55				x		X	+		-			+							282+08 282+14	282+14 283+26	$\square$		-		X		+	X							
125+55 125+61	125+61	1			x			+				X	+							283+26	286+25	1		X				++	+				x			
130+06	130+00	$\ddagger$								+	1	X	+							287+32	287+39	$\downarrow$								x						ļ
130+12	130+38		x		^ X	•-					1		+			+				287+39 287+45	201+45 288+40			x												ļ
132+00 136+77	136+77 136+90	x				X X				$\pm$			+							288+40 289+00	289+00 291+75			x			X									ļ
136+90 141+72	141+72 141+78	X		_				+		+	x		+	_		-				291+75 292+50	292+50 292+82	+	x	+				++		X		_				ļ
141+78 143+50	143+50 146+19	X			x			+		+	1		+							292+82 296+40	296+40 296+68			-	Х		x	+	-							ļ
146+19 146+25	146+25				x					+	1	X	+						$\square$	296+68	296+75	1	X				v	++	1							ļ
149+80	151+47	$\ddagger$			~					+	1	v	+	x						297+33	298+25								+	x						ļ
151+47 151+53	151+53 156+27	╞			x					+	1	×	+							300+00 301+00	301+00						x		1							ļ
156+27 156+33	156+33 157+80	x										X								301+45 304+32	304+32 305+47		X												X	ļ
157+80 158+45	158+45 159+20	+			X			+	X	+			+							305+47 306+18	305+53 306+70	+						+ -	<u> </u>		<b>&gt;</b>	< <u> </u>				ļ
159+20	159+26		X	+	_	~		+					$\mp$							400+00	400+90	$\square$	X								_	_	Х			l
159+26	161+×5										1			1					-				1 2			1			1							l

ath: W:\SHARED\R DRIVE\ACTIVE PROJECTS\MIDPENINSULA OPEN SPACE DISTRICT\150175 - MT. UM ROAD REHAB DESIGN\DRAWINGS\150175\_SITE01.DWG PIot Date: 5/16/2016 7:0

5				E	DGE 1	<b>TREAT</b>	MENT	: RIGHT S	SIDI	ΞO	F ROA	۸D			Feature	s to Re	emain
g Static	tation	e			/ End		ed			upper		tch	٩	ving	<b>L</b>		
ginning	nding S	aa Dik	loulder acking	Ditch	uardrail erminal	oncrete arrier	ock-Lin tch	tved iveway ansitior	Imout	MA Sci	ainage ructure	aved Di	CC Cur	sc. Pa	aved O oncrete tch	ainage ructure	sphalt noulder
쓰 30+00	ш 30+32	٩Н	X Ba	-7	Gu Te	ပိ Ba	Ro Dit	Pa Dri Tri	Τu	H	Str	Ра	Ы	Ϊ	Pa Co Dit	Str	As Sh
31+24 32+00	31+85 36+10		X										X				
36+10 36+16	36+16 36+92	X								Х							
36+92 36+98	36+98 39+25	x								Х							
39+25 40+84	40+84		Х		Y												
40+84	41+77		Х														
42+23	46+17	^	Х							v							
46+17 46+23	46+23	X								×							
47+51 48+75	48+75 49+18	X X															
49+18 49+23	49+23 50+78	Х								X							
50+78 51+17	51+17 52+25	Х	Х		X												
52+25 52+98	52+98 55+44	Х	Х														
55+44 56+20	56+20 59+05		X		Х												
59+05 59+17	59+17 59+90	X			X X												
59+90 63+22	63+22 64+47	X	Х														
64+47 64+53	64+53 66+40	x								Х							
66+40 68-42	68+13		~		x												
69+52	69+67	x	^							~							
69+67	09+/3 71+59	X								X							
/1+59 71+96	/1+96 72+12	X			X X												
72+12 74+70	74+70 78+33	X	X														
78+33 78+47	78+47 78+59	Х								Х							
78+59 80+18	80+18 81+64		Х						X								
81+64 83+90	83+90 84+77	X	Х														
84+77 84+83	84+83 85+77	X								Х							
85+77 85+83	85+83 86+05	×								Х							
86+05	88+92 00+33		Х		v												
90+33	90+33 90+38										X						
90+38 91+96	91+96 92+01									Х							
92+01 93+15	93+15 96+50	X	Х														
96+50 97+45	97+45 97+50		Х			X											
97+50 98+00	98+00 99+47		Х					Х									
99+47 100+80	100+80 106+43	Х			X												
106+43 106+48	106+48 106+71	Х								Х							
106+71 107+75	107+75 107+85		X		Х												
107+85 109+10	109+10 109+16	Х								X							
109+16 111+64	111+64 111+70	Х								X							
111+70	114+50 115+70	Х			×												
115+79	117+98	Х								~							
118+04	120+25	X			~												
120+23	122+80		X														
122+80	124+74									X							
124+80	124+94 131+00		X														
131+00 137+45	137+45 137+92	X					Х										
137+92 137+98	137+98 139+60			X							X						
139+60 140+15	140+15 142+40				X				X								
142+40 149+20	149+20 149+75		X					X				_					
149+75 153+46	153+46 153+51	Х								X							
153+51 154+42	154+42 154+48	Х								X							
	156+35 157+75		Х		×					-							
157+75	159+20	Y	Х														
161+90	162+55		~				X										
162+55	163+59		X		v		^										
163+59 164+79	166+94		Х		X												
166+94 170+22	170+22 172+37		X	X X													
172+37 172+43	172+43 172+90		X	X							X						
172+90 173+55	173+55 175+82	X						X									
175+82	175+88									Х							

ition	ſ	lter	EDGI ms of V	= TF ' 	REAT		RIGHT	SIDE OI	= R(		100) (		IUE	D)	Feature	s to Re	emain
Beginning Sta	Ending Station	HMA Dike	Shoulder Backing	V-Ditch	Guardrail/ Enc Terminal	Concrete Barrier	Rock-Lined Ditch	Paved Driveway/ Transition	Turnout	HMA Scupper	Drainage Structure	Paved Ditch	PCC Curb	Misc. Paving	Paved Or Concrete Ditch	Drainage Structure	Asphalt Shoulder
75+88 80+46 80+52	180+46 180+52 182+00	<u>х</u>	x							X							
82+00 82+92	182+92 184+86	X X			x												
84+86 91+77	191+77 193+18		X		x												
93+18 94+00	194+00 202+50	X X			X												
02+50 02+56 02+45	202+56 203+45	Х								X							
03+45 03+80 04+45	203+80 204+45 206+43				X												
06+43 06+51	200+43 206+51 206+97		x														Х
06+97 07+27	207+27 208+00	Х												Х			
08+00 11+79	211+79 211+89											Х		X X			
11+89 11+95 15+63	211+95 215+63 215+75	Х									X	x					
15+75 15+81	215+81 216+25			X							Х						
16+25 17+45	217+45 217+96	Х		X													
17+96 18+02	218+02 220+00	X									X						
∠∪+00 21+97 22+02	221+97 222+03			X												Х	
23+66 24+23	223+00 224+23 224+29		X X	X							X						
24+29 24+66	224+66 225+72		X	X X													
25+72 25+78	225+78 227+00	X									X						
27+00 28+25	228+25 229+36			X		X											
30+55 32+35	232+35 234+11					X								X			
34+11 34+17	234+17 234+50		X X	X							Х						
34+50 34+95	234+95 236+50	Х		X													
36+50 38+30 38+75	238+30 238+75 238+81			X		X					X						
38+81 40+25	240+25 242+25	X				X											
42+25 43+56	243+56 243+62			Х							Х						
43+62 44+14	244+14 244+20			X							Х						
44+20 44+30 45+30	244+30 245+39		x	X X V													
46+35 46+41	246+41 247+50		x	X							Х						
47+50 48+00	248+00 248+82			Х											X		
48+82 48+92	248+92 248+98										Х	X					
48+98 51+43 51+49	251+43 251+49 254+18			X							Х						
54+18 54+24	254+24 256+05			X							Х						
56+05 57+35	257+35 257+78	X		X													
57+78 57+84	257+84 262+00	Х		~							X						
62+20 62+82	262+20 262+82 266+60		x					X									
66+60 67+32	267+32 268+85		X		X												
68+85 70+62	270+62 270+68	X								X							
/0+68 70+88 72±20	270+88 272+30	X 	x														
74+52 74+58	274+52 274+58 274+73									x							
74+73 76+00	276+00 277+45		X						x								
77+45 79+12	279+12 279+35		x		X												
79+35 82+10 82+12	282+10 282+13 282+17	X V														Х	
82+13 82+17 83+48	283+48 289+40		x														
89+40 90+35	290+35 292+80	X	X														
92+80 95+28	295+28 295+46											X		X			
95+46 97+94 98±00	297+94 298+00	X								X							
90+00 00+00 00+88	290+25 300+88 301+32		X					x									
01+32 04+12	304+12 305+00		X														X
05+00 06+00	306+00 306+80	X	X														
00+28	401+04								1	l I			I X I				



Т.4





![](_page_12_Figure_0.jpeg)

h: W:\SHARED\R DRIVE\ACTIVE PROJECTS\MIDPENINSULA OPEN SPACE DISTRICT\150175 - MT. UM ROAD REHAB DESIGN\DRAWINGS\150175\_SITE01.DWG Plot Date: 5/16/2016 7:07

![](_page_13_Figure_1.jpeg)

![](_page_13_Figure_2.jpeg)

4 EROSION PROTECTION @ SUBDRAIN OUTLET.

NTS

![](_page_13_Figure_3.jpeg)

![](_page_13_Figure_4.jpeg)

![](_page_14_Figure_0.jpeg)

![](_page_15_Figure_0.jpeg)

2	TAPER ROADWAY WIDTH FROM 18' TO 14' TO MATCH EXISTING ROADWAY WIDTH @ GATE
3	PLACE 3" HMA TO PROVIDE DRIVEWAY TRANSITION FROM NEW ROADWAY SURFACE.
4	CONSTRUCT 3' WIDE PCC SWALE ACROSS PAVED DRIVEWAY. 8 D.2
5	REMOVE EXISTING ASPHALT PAVEMENT BEYOND NEW ROADWAY EDGE.
6	REMOVE EXISTING GATE.
7	INSTALL (2) 4" SCH. 40 PVC CONDUITS UNDER ROADWAY. 2 D.4
8	INSTALL CHRISTY™ B1730 H/20 LOADING UTILITY BOX IN SHOULDER & TIE IN CONDUITS.
9	TIE IN CONDUITS TO EX. AT&T VAULT.
10	INSTALL PCC CURB @ PAVEMENT EDGE. 7 D.2
11	EXISTING FLAGPOLE & BASE TO REMAIN, PROTECT-IN-PLACE DURING CONSTRUCTION.
12	CLEAR EXISTING CONCRETE DITCH OF DEBRIS.
13	EXTEND PAVING TO MATCH FLUSH W/EXISTING CONCRETE DITCH. 10 D.1
14	REMOVE & REPLACE PORTION OF EXISTING CONCRETE DITCH.
15	REMOVE EXISTING CONCRETE PAD FROM SHOULDER; BACKFILL W/NATIVE SOIL.

# Attachment 1

![](_page_16_Figure_0.jpeg)

![](_page_16_Figure_1.jpeg)

![](_page_17_Figure_0.jpeg)

0	RECYCLING I
2	REMOVE & R
3	INSTALL SHO
4	CLEAR SHOU
5	REMOVE & R
6	REMOVE & R ON SHEET T.
7	REMOVE & R
8	INSTALL 25' T
9	REMOVE & R
10	APPLY CENT TABLE "ROAI

# AREA OF WORK SHOWN ON THIS PLAN SHEET JMUNH KEY MAP NORTH Inc. Engineering ------Ш Pavement (9)MATCH **OPEN SPACE DISTRICT** ROJECT +26 **ABILITATION PI** 69 EXISTING PAVEMENT & PLACE NEW HMA SURFACE COURSE (PER SPECIAL S). 8 D.1 PLAN STA REPLACE/INSTALL HMA DIKE. 9 D.2 OR 12 D.2 OULDER BACKING @ EDGE OF PAVEMENT. 2 D.2 SITE PI 55+24 TO DULDER OF DEBRIS & INSTALL V-DITCH. 10 D.2 ROAD REH **MIDPENINSULA REGIONAL** REPLACE HMA SCUPPER. MATCH FLUSH W/EXISTING OVER SIDE DRAIN. 12 D.2 REPLACE DRAINAGE STRUCTURE. REFER TO "DRAINAGE STRUCTURES" TABLE REPLACE/INSTALL GUARDRAIL W/STEEL POSTS & RECYCLED PLASTIC BLOCKS. 5 D.1 OR 9 D.1 МТ. ИМИНИМ TANGENT GUARDRAIL END TERMINAL. 3 D.5 REPLACE ROADSIDE PADDLE. ST ITERLINE & EDGE LINE STRIPING TO PROVIDE 8' WIDE (TYP.) TRAVEL LANES; SEE ADWAY STRIPING" ON SHEET T.3 FOR STRIPING DESCRIPTIONS & LOCATIONS. SHEET SPECIFIC NOTES: NOT FOR 1 BAR DOWN LOOSE ROCKS ON UPSLOPE (PER SPECS). CONSTRUCTION 2 INSTALL ROCK FENCE ON UPSLOPE. 5 D.2 3 INSTALL PRE-CAST CONCRETE BARRIER. 2 D.1 4 EXISTING RETAINING WALL, TO REMAIN. 5 REMOVE EXISTING RETAINING WALL & INSTALL GABION WALL. 1 D.2 RAWN BY: 6 INSTALL SIGN POST & MOUNT "FALLING ROCK" SIGN. JRE \* NUMBER: 150175 1"= 30' MAY 2016

Attachment 1

GRAPHIC SCALE SCALE: 1 INCH = 30FEE HEET NUMBER:

**C.3** 

![](_page_18_Figure_0.jpeg)

![](_page_19_Figure_0.jpeg)

![](_page_19_Figure_2.jpeg)

![](_page_19_Picture_3.jpeg)

![](_page_20_Figure_0.jpeg)

<u>NO.</u>	AC	AB	R-VALUE
19	3-1/2"	4"	-
20	3"	3"	-

![](_page_21_Figure_0.jpeg)

# Attachment 1

![](_page_22_Figure_0.jpeg)

	• BORING LOG
	NO.         AC         AB         R-VALUE           25         5"         0"         -           26         2-1/2"         3-1/2"         40           27         2-1/2"         0"         -           28         4-1/2"         2-1/2"         -           29         4"         3"         -
128+00       128+00         128+00       129+00         120+00       120+00	6 DS #36 130 + 00 FASEMENT
а 138+00 Селения 138+00 Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения Селения С	SEMENTO
EASEMENT MCQUEEN PROPERTY MCQUEEN PROPERTY MCQUEEN PROPERTY MCQUEEN SPACE DISTRICT	
$\begin{array}{c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & &$	12 12 145 145 144+00 117777777777777777777777777777777777

![](_page_22_Figure_3.jpeg)

![](_page_23_Figure_0.jpeg)

# Attachment 1

![](_page_24_Figure_0.jpeg)

th: W:\SHARED\R DRIVE\ACTIVE PROJECTS\MIDPENINSULA OPEN SPACE DISTRICT\150175 - MT. UM ROAD REHAB DESIGN\DRAWINGS\150175\_SITE02.DWG Plot Date: 5/16/2016 7:12

![](_page_25_Figure_0.jpeg)

![](_page_25_Figure_5.jpeg)

![](_page_26_Figure_0.jpeg)

Ð	BORIN	ORING LOG		
<u>NO.</u>	AC	AB	<u>R-VALUE</u>	
40	5"	3-1/2"	-	
41	5"	8"	29	

![](_page_27_Figure_0.jpeg)

# BORING LOG

<u>NO.</u>	AC	AB	R-VALUE
44	5"	3"	-
45	4-1/2"	4"	-

# NOTES:

10

- RECYCLING EXISTING PAVEMENT & PLACE NEW HMA SURFACE COURSE (PER SPECIAL PROVISIONS).
   8 D.1
- 2 REMOVE & REPLACE/INSTALL HMA DIKE. 9 D.2 OR 12 D.2
- 3 INSTALL SHOULDER BACKING @ EDGE OF PAVEMENT. 2 D.2
- 4 CLEAR SHOULDER OF DEBRIS & INSTALL V-DITCH. 10 D.2
- 5 REMOVE & REPLACE HMA SCUPPER. MATCH FLUSH W/EXISTING OVER SIDE DRAIN. 12 D.2
- 6 REMOVE & REPLACE DRAINAGE STRUCTURE. REFER TO "DRAINAGE STRUCTURES" TABLE ON SHEET T.2 FOR TYPE OF STRUCTURE & MISC. NOTES. 1 D.3 OR 2 D.3
- REMOVE & REPLACE/INSTALL GUARDRAIL W/STEEL POSTS & RECYCLED PLASTIC BLOCKS. 5 D.1 OR 9 D.1
- 8 INSTALL 25' TANGENT GUARDRAIL END TERMINAL. 3 D.5
- 9 REMOVE & REPLACE ROADSIDE PADDLE.
- APPLY CENTERLINE & EDGE LINE STRIPING TO PROVIDE 8' WIDE (TYP.) TRAVEL LANES; SEE
   TABLE "ROADWAY STRIPING" ON SHEET T.3 FOR STRIPING DESCRIPTIONS & LOCATIONS.
   1 D.1

# SHEET SPECIFIC NOTES:

- **1** GRADE AREA TO DRAIN AWAY FROM ROADWAY & PLACE 3" HMA FOR TURNOUT. 6 D.1
- 2 INSTALL SIGN POST & MOUNT "NO PARKING" SIGN.
- **3** DRAINAGE STRUCTURE TO REMAIN, CLEAR OF DEBRIS.
- INSTALL SIGN POST & MOUNT "FALLING ROCK" SIGN.
- **5** INSTALL PRE-CAST CONCRETE BARRIER. 2 D.1
- **INSTALL ROCK FENCE ON UPSLOPE**. <u>5 D.2</u>
- **7** REMOVE EX. PAVEMENT & PERFORM SHALLOW SETTLEMENT REPAIRS TO UNDERLYING SECTION. 3 D.1

Contraction of the second seco

![](_page_27_Figure_23.jpeg)

![](_page_28_Figure_0.jpeg)

		BORING LOG				
		<u>NO.</u> 46 47 48 49	<u>AC</u> 2-1/2" 4" 4"	<u>AB</u> 0" 3" 3" 1"	<u>R-VALUE</u> 36 - - -	
2 2 2 2 2 2 3 4 2 3 4 0 0 0 0 0 0 0 0 0 0 0 0 0	3	9			<u>□</u> <u>□</u> <u>↓</u> 47 236+00	
	P 234-00 DS #52 3 3					
9 9 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 1 1 1 1 1 1 1 1 1 1 1 1 1	5 244+00 244+00 DS #55	245+ 111111777 11111777 11111777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777 111117777				

6

4

# NOTES:

- RECYCLING EXISTING PAVEMENT & PLACE NEW HMA SURFACE COURSE (PER SPECIAL PROVISIONS).
   B D.1
- 2 REMOVE & REPLACE/INSTALL HMA DIKE. 9 D.2 OR 12 D.2

Ø

- 3 INSTALL SHOULDER BACKING @ EDGE OF PAVEMENT. 2 D.2
- 4 CLEAR SHOULDER OF DEBRIS & INSTALL V-DITCH. 10 D.2
- **5** REMOVE & REPLACE HMA SCUPPER. MATCH FLUSH W/EXISTING OVER SIDE DRAIN. 12 D.2
- 6 REMOVE & REPLACE DRAINAGE STRUCTURE. REFER TO "DRAINAGE STRUCTURES" TABLE ON SHEET T.2 FOR TYPE OF STRUCTURE & MISC. NOTES. 1 D.3 OR 2 D.3
- **REMOVE & REPLACE/INSTALL GUARDRAIL W/STEEL POSTS & RECYCLED PLASTIC BLOCKS.** 5 D.1 OR 9 D.1
- 8 INSTALL 25' TANGENT GUARDRAIL END TERMINAL. 3 D.5
- 9 REMOVE & REPLACE ROADSIDE PADDLE.
- APPLY CENTERLINE & EDGE LINE STRIPING TO PROVIDE 8' WIDE (TYP.) TRAVEL LANES; SEE TABLE "ROADWAY STRIPING" ON SHEET T.3 FOR STRIPING DESCRIPTIONS & LOCATIONS.

# SHEET SPECIFIC NOTES:

4

- **1** INSTALL SIGN POST & MOUNT "FALLING ROCK" SIGN.
- **2** INSTALL PRE-CAST CONCRETE BARRIER. 2 D.1
- **4** REMOVE EXCESS ASPHALT BEYOND NEW EDGE OF PAVEMENT.
- CLEAR BRUSH IN SHOULDER FROM STA. 234+80 TO 236+30
- 8 INSTALL SIGN POST & MOUNT "CURVE" SIGN.

![](_page_28_Figure_25.jpeg)

# Attachment 1

![](_page_29_Figure_0.jpeg)

# Attachment 1

![](_page_30_Picture_0.jpeg)

•	BORING LOG

<u>NO.</u>	AC	AB	<u>R-VALUE</u>
53	5"	3"	-
54	5"	3"	-
55	4"	3-1/2"	-
56	4-1/2"	3-1/2"	25

![](_page_31_Picture_0.jpeg)

					APP
MATCHLINE - STA. 292+13 - SEE BELOW L	EFT				DESCRIPTION
					REV DATE
		Pavement Engineering Inc	You can ride on our reputation	Corporate Office: 3485 Sacramento Drive, Suite A San Luis Obispo, CA 93401-6015 805-781-2265	
PECIFIC NOTES:		DISTRICT	ROJECT	C	2
TING PAVEMENT & INSTALL SUBDRAIN AS SHOWN. 6 0.3 NOUT IN SHOULDER & CONNECT TO SUBDRAIN. 5 0.3 SCH. 40 OR SDR. 28 PVC PIPE TO SUBDRAIN & DAYLIGHT @ HINGPOINT. EROSION PROTECTION @ SUBDRAIN OUTLET. POST & MOUNT "FALLING ROCK" SIGN. 4 0.4 'ED DITCH TO REMAIN; CLEAR OF DEBRIS & MAKE REPAIRS IF NECESSARY. NG TO MATCH FLUSH W/EXISTING PAVED DITCH. 10 0.1 'PLACE/INSTALL PAVED DITCH. 11 0.2 TO DRAIN AWAY FROM ROADWAY & PLACE 3" HMA FOR DRIVEWAY TRANSITION. NTABLE HMA DIKE ACROSS PAVED DRIVEWAY TRANSITION. 6 0.2 POST; MOUNT "NO PARKING" & "NO STOPPING" SIGNS. 'E TO REMAIN, PROTECT IN PLACE.		MIDPENINSULA REGIONAL OPEN SPACE D	MT. UMUNHUM ROAD REHABILITATION PF	SITE PLAN	01A. 203733 10 11CA3 RUA
PLACE "25 MPH SPEED LIMIT" SIGN ON EXISTING POST. N TO REMAIN, PROTECT IN PLACE. STING SCOURED DITCH W/NATIVE SOIL/GRAVEL & INSTALL PAVED DITCH. 11 D. FOR EROSION PROTECTION. 3 D.4 TING PAVEMENT & PLACE 3" HMA FOR DRIVEWAY TRANSITION. 10 D.1 NCRETE COLLAR TO REMAIN; PAVE FLUSH. ATE LOCATION; TO BE INSTALLED BY OTHER, NOT IN CONTRACT.	2	COI	NOT NSTR	FOR	N
ROADWAY WIDTH FROM 18' TO 24'. SCUPPER & EXTEND TO HINGE POINT. <u>12 D.2</u> TING PAVEMENT & CONSTRUCT TRAVERSE CONFORM @ HICKS ROAD. <u>13 D.1</u>		DRAWN E PROJECT SCALE: DATF <sup>.</sup>	JF: JF NUMBER 150 1" =	RE 175 : 30'	
POST ADJACENT TO LIMIT LINE & MOUNT "STOP" SIGN. PAVEMENT LEGEND TO NEW PAVEMENT SURFACE.	GRAPHIC SCALE $0 30 60$ $CALE: 1 INCH = 30 FEET$	SHEET N	MAY IUMBER: C.	<sup>2016</sup>	

# April 7, 2016 SET

# **General Comments**

Comment #1: Add SANTA CLARA COUNTY to title block in all sheets.

Comment #2: Missing General Notes, Demolition Notes, Grading Notes, Specifications, Erosion Control, and Construction Notes.

Comment #3: Missing Legend in all Site Plan sheets.

Comment #4: Provide scale bar in all Site Plan sheets.

Comment #5: Provide road widths in all Site Plan sheets and/or table.

Comment #6: Provide easement widths/dimensions where applicable.

Comment #7: Add Install Property Markers callouts, where applicable. Add detail, specs.

Comment #8: Provide Road Side Marker/Paddle detail.

Comment #9: Add <u>CONTRACTOR RESPONSIBILITY</u> to Remove and Replace Guardrail callouts, where applicable.

Comment #10: Provide tree protection?

Comment #11: Provide Base Rock detail?

Should scuppers in plan view orient as in detail sheet 23?

# Sheet 1: Title Sheet

Comment #1: Add SANTA CLARA COUNTY, CALIFORNIA.

Comment #2: Add <u>17</u> in Location Map highway bubble.

Comment #3: Add SITE PLAN to Sheet Description column for sheets 2 to 19 (or 20?) in Sheet Index.

Comment #4: Remove + in Sheet No. column of Sheet Index.

Comment #5: Adjust Sheet Index table to account for missing Sheet No. 20.

Comment #6: Add Install Shoulder Backing in Legend.

Comment #7: Add Conduit and Junction Box in Legend.

Comment #8: Add Gabion Wall in Legend.

# Sheet 3: Site Plan

Comment #1: Add Install V-Ditch callout.

Comment #2: Provide detail to Remove & Replace Portion of Existing Swale callout (31+50).

Comment #3: Provide replacement note and/or detail to Remove Concrete in Roadway callout (35+37).

Comment #4: Add gate callouts (EX, REMOVE, or INSTALL). Provide detail if necessary.

Comment #5: Remove left side Shoulder Backing where not needed (300+00 to 304+32).

Comment #6: Add callout to driveway transitions. Are they paved? Place Base Rock? Missing left Offset from New EP dimension.

# Sheet 4: Site Plan

Comment #1: Add range and width to Remove Excess Material callout. Provide detail.

Comment #2: Provide detail for trimming bank.

# Sheet 5: Site Plan

Comment #1: Add Remove & Replace AC Dike callout in top plan view.

Regrade roadway callout - over side drain = scupper?

### Sheet 6: Site Plan

Comment #1: Add Install Shoulder Backing callout in top plan view.

Comment #2: Add range and width to Remove Excess Material callout.

Comment #3: Add callout to paved driveway transition. Missing Offset from New EP dimension. Place Base Rock?

Comment #4: Provide detail for gate removal callout.

Comment #5: 8' width shown in Turnout detail.

Comment #6: Provide specs for No Parking sign.

Comment #7: Provide detail/specs for Property markers.

Comment #8: Provide detail for trimming bank.

### Sheet 7: Site Plan

Comment #1: Add range and width to Remove Excess Material callout.

Comment #2: Provide detail for regrading roadway to provide min. 5% slope.

Comment #3: Add callout, range, and width to Remove Excess Material hatch.

### Sheet 8: Site Plan

Comment #1: Add callout to paved driveway transition. Place Base Rock?

Comment #2: Add Install Shoulder Backing callout.

# Sheet 9: Site Plan

- Comment #1: Add Remove & Replace AC Dike callout in bottom plan view.
- Comment #2: Provide profile/cross section for new culvert.
- Comment #3: Add range and width to Remove Excess Material callouts in top and bottom plan views.
- Comment #4: Provide detail for trimming bank.

### Sheet 10: Site Plan

- Comment #1: Add Remove & Replace AC Scupper callout.
- Comment #2: Add callout, range, and width to Remove Excess Material hatch.
- Comment #3: 8' width shown in Turnout detail.
- Comment #4: Provide Remove Ex. Signage detail.

### Sheet 11: Site Plan

Comment #1: Add callout to paved driveway transitions. Place Base Rock in top plan view? Missing bottom view Offset from New EP dimension.

- Comment #2: Add top and bottom plan views Shoulder Backing callouts.
- Comment #3: Floating sign near station 158+70.
- Comment #4: Provide specs for No Parking sign.

Comment #5: Install Rock for Erosion Protection – How, where, type of rock, amount?

# Sheet 12: Site Plan

Comment #1: Add Remove & Replace AC Dike callout in top plan view.

Comment #2: Add callout to paved driveway transitions. Place Base Rock in R driveway? Missing R and L Offset from New EP dimensions.

Comment #4: See Zachary Swale comment for sheets 6 and 11.

Comment #5: Install Rock for Erosion Protection – How, where, type of rock, amount?

# Sheet 13: Site Plan

Comment #1: Add callout to paved driveway transition. Missing Offset from New EP dimension.

Comment #2: Provide specs for No Parking sign.

Comment #3: Provide plan for regrading in driveway transition.

Comment #4: Add range and width to Remove Excess Material callouts in middle and bottom plan views.

# Sheet 14: Site Plan

Comment #1: Add callout to paved driveway transition. Place Base Rock in R driveway? Missing Offset from New EP dimension.

Comment #2: Provide detail and/or explain Matching Flush callout in top plan view.

Comment #3: Provide detail and/or explain Match New Pavement callout in bottom plan view.

# Sheet 15: Site Plan

Comment #1: 8' width shown in Turnout detail.

Comment #2: Provide specs for No Parking sign.

# Sheet 16: Site Plan

Comment #1: Add callout to top plan view Pavement Repair.

Comment #2: Clear Brush – Provide width.

# Sheet 17: Site Plan

Comment #1: Add Remove & Replace AC Dike callout in bottom plan view.

Comment #2: Top and bottom plan views - Add callout to paved driveway transitions. Place Base Rock in driveways? Missing bottom view Offset from New EP dimensions.

# Sheet 18: Site Plan

Comment #1: 8' width shown in Turnout detail.

Comment #2: Add range and width to Remove Excess Material callouts in top and bottom plan view.

Comment #3: Provide profile/cross section for new subdrain.

# Sheet 19: Site Plan

Comment #1: Install Rock for Erosion Protection callout in top plan view – How, where, type of rock, amount?

Comment #2: Add callout to paved driveway transitions in top and bottom plan views. Place Base Rock in in top and bottom plan views? Missing Offset from New EP dimension in top and bottom plan views.

Comment #3: Provide specs for New Manual Gate Location.

Comment #4: Place Rock for Erosion Protection callout in bottom plan view – How, where, type of rock, amount?

Comment #5: Provide detail for Transition Roadwidth callout in bottom plan view.

Comment #6: Provide detail for Transition New Pavement callout to Hicks Road.

# Sheet 21: Item of Work Tables

Comment #1: AC Dike table – Split each of items 63+22, item 69+52, item 74+70 into two items to account for AC Scupper.

Comment #2: AC Dike table – Split item 83+90 into three items to account for AC Scuppers.

Comment #3: AC Dike table – Missing from station 183+00 to 187+00.

Comment #4: AC Dike table – Station 235+60 does not match Site Plan.

Comment #5: AC Dike table - Item station 240+25 not on Site Plan.

Comment #6: Bar Down/Remove Boulders table – Consider consolidating the three continues items with Beginning Stations 46+20, 47+51, and 48+75.

Comment #7: Bar Down/Remove Boulders table – Replace station 53+00 R with L.

Comment #8: Bar Down/Remove Boulders table – Station 86+00 does not match Site Plan.

Comment #9: Bar Down/Remove Boulders table – Station 148+00 does not match Site Plan Replace <u>R</u> with <u>L</u>.

Comment #10: Bar Down/Remove Boulders table – Item station 234+50 not on Site Plan.

Comment #11: AC Scupper table – Missing scupper near station 49+25.

Comment #12: AC Scupper table – Revise item at station 64+70 to 69+70.

Comment #13: AC Scupper table – Replace station 212+10 R with L.

Comment #14: Concrete Barrier table – Replace station 96+50 L with R.

Comment #15: Base Rock Turnouts table – Add Turnout Length column, per sheet 22 detail.

- Comment #15: Base Rock Turnouts table Station 140+45 does not match Site Plan.
- Comment #16: Drainage Structures table #20 does not match Site Plan labeling.
- Comment #17: Drainage Structures table Replace station 217+99 L with R.
- Comment #18: Paved Ditch table Item station 292+80 not on Site Plan.
- Comment #19: Paved Driveways/Transitions table Add L to Item station 296+40.
- Comment #20: Add line under second header.
- Comment #21: Guardrail & End Terminals table Revise item at station 106+75.

Comment #22: Settlement Repairs Under Roadway table - Item station 237+40 not on Site Plan.

- Comment #23: Remove Tree table Missing trees near stations 153+40, 153+60, 164.25.
- Comment #24: Rock Fence table 53+00 to 53+90 does not match Site Plan.
- Comment #25: Roadside Paddles table 154+75 does not match Site Plan.
- Comment #26: Roadside Paddles table Replace station 201+30 L with R.
- Comment #27: Shoulder Backing table Split item 97+45 into two items to account for driveway.
- Comment #28: Shoulder Backing table Split item 252+30 into two items to account for driveway.
- Comment #29: Shoulder Backing table Split item 296+34 into three items to account for driveways.
- Comment #30: V-Ditch table 61+60 to 78+73 does not match side on Site Plan.
- Comment #31: V-Ditch table 79+30 to 82+16 does not match Site Plan.
- Comment #32: V-Ditch table Item 198+00 not in correct row.
- Comment #33: V-Ditch table 242+25 to 256+05 does not match Site Plan.
- Comment #34: V-Ditch table 297+45 to 298+30 does not on site plan.

# Sheet 22: Details

Comment #1: Shallow and Deep Pavement Repair details – Called out as Settlement Repair in Site Plan Sheets and in sheet 21.

NEW COMMENT (2016-04-27): Pre-Cast Concrete Barrier @ Edge detail – 8.5' FROM CL callout should be 8' from center line. Callout is cut off.

Comment #2: Vehicle Turnout Construction detail - Grade to where?

### Sheet 23: Details

Comment #1: Rock Fence Typical Section detail – Detail shows Roadway Edge. Show V-Ditch.

Comment #2: Rock Fence Typical Section detail – Specify footing material.

Comment #3: Rock Fence Typical Section detail – Show distance from bottom of 2-3/8" pipe to bottom of footing.

Comment #4: Culvert Trench Cross-Section detail – Add Compaction % to backfill.

Comment #5: Gabion Wall detail – Add Compaction % to Class II AGG, Base.

Comment #6: Conduit Trench Cross-Section detail – Add a Tie In New Conduits note.

Comment #7: Pre-Cast Concrete Barrier detail - Bevel dimension.

# Sheet 24: Details

Comment #1: Subdrain detail – Provide compaction requirements for native material, backfill material.